The American Artisan
And Hardware Record

Vol. 50. No. 23. CHICAGO, DECEMBER 9, 1905. $2.00 Per Year.

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COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.
Bolts, Rivets, Nuts, Washers, Carriage Forgings, Etc.
CATALOG AND PRICES ON APPLICATION.

Always On Top

Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. **American Seal Elastic Oil Cement** is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.

Agencies:
THE PERKINS ROOFING & SUPPLY CO.
235 Lake St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, MO.

FURNACE CHAIN
AMERICAN PATTERN
The kind that lasts as long as the furnace
Manufactured by
Oneida Community Ltd.,
ONEIDA, N. Y.

This Space for Sale. Inquire of Daniel Stern, 69 Dearborn St., Chicago.

THE ATLAS
BOLT & SCREW COMPANY
CLEVELAND, OHIO
STOVE BOLTS, RIVITS, RODS

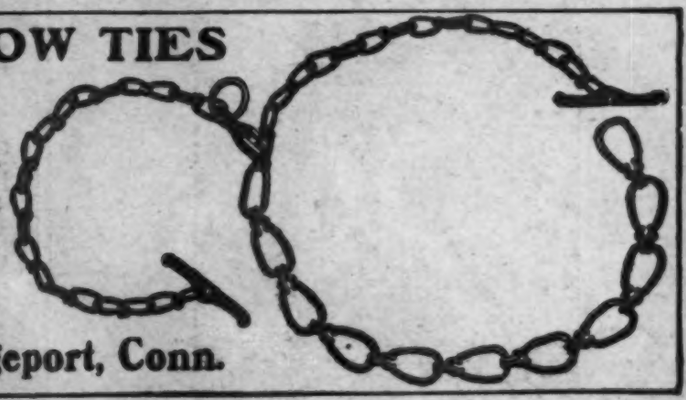
And Kindred Articles.
Catalogue and Prices on Application

BLACK DIAMOND FILES and RASPS

PERFECT—ALWAYS
Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.
G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA

BROWN WELDLESS COW TIES
Twice as strong as welded chain.

A sample (full length) delivered for **one cent.** Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.



Sole Manufacturers
The Bridgeport Chain Co., Bridgeport, Conn.

Broken View Tremont Furnace Showing Hot Blast and Long Fire Travel.

THE DOLLAR BIRDS MADE THEIR NESTS IN THE RURAL DISTRICTS THIS YEAR .·. .·.

They hatched out 6½ Billions of Dollars for American Farmers to spend

Farmers are "fixing up" their homes and they are in the market for Warm Air Furnaces.

The Tremont All Steel Furnace

Is the Best "Farmer's Furnace"

When it has been properly "set up" it is there for a life time. It is made of Locomotive Fire Box Steel and is riveted and calked as well as a Steam Boiler made to stand 300 lbs. pressure. There is not a cement or sand joint. There is nothing temporary, everything is made permanent. The fire-pot may be either cast iron or fire brick, and is made sectional. They are put into place through the feed door, anybody can do it. This furnace will burn any fuel that can be brought to it, including the rough wood that accumulates about a farm.

It is a powerful Heating Furnace and can be installed with safety to heat a big roomy house that is exposed on all sides. We guarantee it.

Pittsburgh Stove & Range Co.
PITTSBURGH, PA.

THE CLERMONT
AIR-TIGHT HOT-BLAST

Is a Heater you can sell with the feeling that its purchasers won't be continually calling upon you to make good an unfulfilled claim.

The CLERMONT is honestly made and is certain to please.

You'll find our circulars and prices mighty interesting. In the circular is told in detail how the CLERMONT burns slack, soft coal or lignite; how the fire bowl is made to insure perfect results. And our prices are strong points for the dealer. Ask for details.

Gem City Stove Company
DAYTON, OHIO

Jewel Gasolene Stoves

1881 1906

Jewel All-Steel Gasolene Evaporator Cabinet Range

FEATURES Large oven and warming closet under top. Polished brass tank, double seamed removable independent German silver needle valves for each burner. Sub-flames giving perfect combustion. Thee burners on top, extra large burner on step and in oven. Cabinet frames of steel mounted on castors, drip pans under all burners, raised grates. Step suitable for extra oven or wash boiler. The nickeled trimmings, towel rails, and brass tank contrast strongly with the ebony finish of the steel, and make a very rich appearance.

Jewel excellence to-day is the result of *Twenty-Five* years of honest effort to make Jewel Stoves the best in the world.

Write for Catalog No. 64

GEORGE M. CLARK & CO., DIVISION AMERICAN STOVE CO. **CHICAGO**

Jewels are all right.

The Safe Gasoline Stove

The

"INSURANCE"

is the only stove where provision is made to automatically shut off the gasoline should the burners be accidently blown out or a child open any of the valves.

ORDER NOW FOR 1906

Manufactured by

NATIONAL STOVE COMPANY Div. American Stove Co. LORAIN, OHIO

BRANCHES:

318 Vine St., ST. LOUIS, MO. ST. PAUL, MINN. 215 Church St., PHILADELPHIA, PA.

FOR SALE BY

HARPER & McINTYRE CO.,
Ottumwa, Iowa.
Southern Iowa and Northern Missouri.

F. M. BORDEN & BRO.,
118-120-122 No Second St, Philadelphia, Pa.

MARSHALL WELLS HARDWARE CO.,
Duluth, Minn.
Northern Wis., Northern Minn., North Dakota and Northern part of South Dakota.

PACIFIC STOVE CO.,
Los Angeles, California.
State of California.

The "RELIABLE" Range

Sells Quickest—Because

in its construction are combined in perfect harmony **not a few—but all** features of practical value that are considered desirable by dealers in, and by users of, steel ranges.

Made and fully guaranteed by

Catalogue No. 26A and prices to the trade will interest you. Write for them NOW.

The Schneider & Trenkamp Co.

Div. of American Stove Co.

Cleveland, Ohio

QUICK MEAL QUICK MEAL QUICK MEAL THAT'S WHAT THEY ARE. QUICK MEAL QUICK MEAL QUICK MEAL

Others Pattern After This Range

"Quick Meal" Steel Ranges

are the best product for the least money. They are not made to meet cheap COMPETITION.

Quick Meal Steel Ranges are so good that each buyer is a walking advertisement. It is a Range that gives such universal satisfaction that everybody recommends it to their friends.

Why not sell them?

RINGEN STOVE CO. DIV. OF AMERICAN STOVE CO.

ST. LOUIS.

Foster's Prize Steel Range

The Leader of the Season.

It embodies all late improvements looking to quality and efficiency, yet can be sold at comparatively low prices. It will pay the dealer to order a sample and consider agency.

Write for Catalog.

THE FOSTER STOVE CO.

IRONTON, OHIO

The MATCHLESS

A STEEL RANGE THAT APPEALS TO THE BUYER

For it is handsome, durable and efficient. Dealers can sell them quicker than any other.

Top cooking surface, 30x36. Oven 12 inches high, 17 inches wide, 21 inches deep.

Six 8-inch lids. Balance oven door. Capacity of reservoir, 15 gallons. Built heaviest where strain is greatest.

No. 318 R, Like Cut, Price F. O. B. Factory:

With Aluminum Trimming,
$17.10

With Nickel Trimming in full,
$18.90
Net Fifteen Days.

A Guarantee Bond sent with every range shipped.

SEND FOR COPY

LANDAY STEEL RANGE CO.

ST. LOUIS, MO.

No. 318 R, 400 pounds.

Monarch Calorific
No. 184

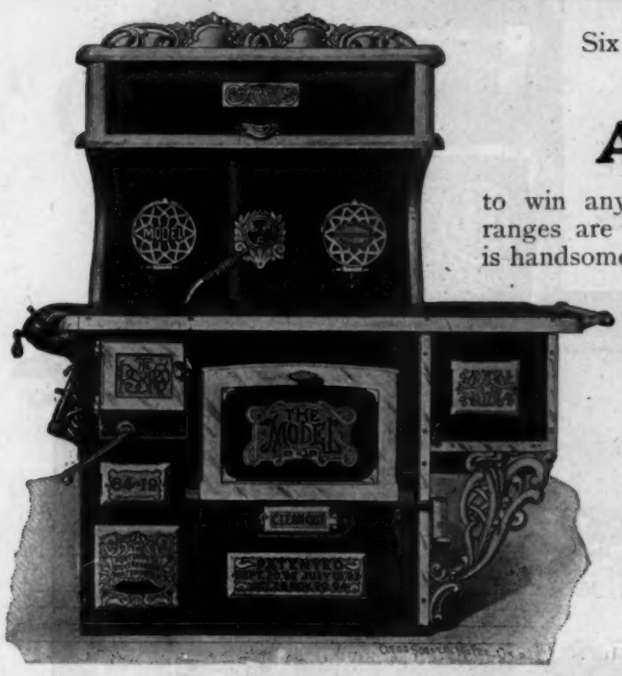
FOR INCANDESCENT FUEL

Monarch Calorific Gas Heaters

Use incandescent fuel and are veritable furnaces for heating capacity. Constructed with powerful cast iron burners, adjustable orifices and air mixers. Send for Catalogue No. 47, showing the complete line of gas heating appliances which we manufacture. :: :: ::

Standard Lighting Co., Div.
American Stove Co.
CLEVELAND, OHIO

The MODEL STEEL RANGE



Six Hole, with Reservoir, Pouch Feed and High Closet.

A BEAUTY

to win any woman's favor. Dealers who sell these ranges are very popular with the fair sex. The range is handsomely decorated with nickel, and consists of a nicely polished steel. Shows to great advantage in any kitchen. As for usefulness every woman who has used it will testify that it is *nonpareil.* Is ready for baking in a comparatively short time, bakes uniformly and steadily with less fuel than the cheap or mis-shapen ranges that you often see.

It is made solidly and carefully to the minutest details, yet sells comparatively cheap.

**SEE OUR CATALOG.
WRITE FOR AGENCY.**

Portsmouth Stove & Range Co.,
PORTSMOUTH, O.
Morley Bros., Saginaw, Mich., Wholesale Agents for Mich.

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

When you arrange for **1906** Decide to use

Steel Casing Rings

Get our prices.
Compare with your present cost.
The marked saving effected will help you in deciding quickly. They never break. Are always ready for use. Perfect in circle and circumference, solid in construction.
WRITE NOW.

The Walworth Run Foundry Co.

Makers of Fine Grey Iron Castings. Manufacturers of Warm Air Registers.

883 Empress St., CLEVELAND, OHIO

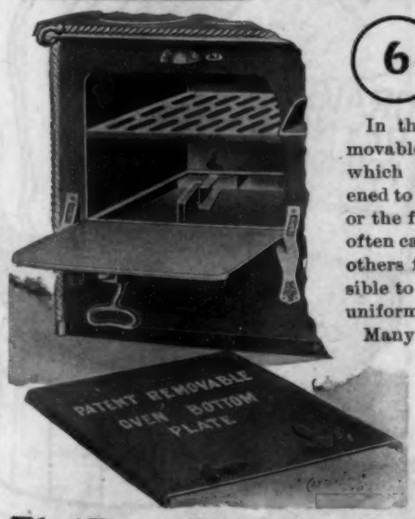
VACUUM STEAM HEATING (Morgan Patents)

The Marvelous Fuel Saver. Write at once for New Catalogues.

Kellogg-Mackay-Cameron Co. (Sole Owners)

Chicago Minneapolis Kansas City Seattle

Strong Points of BORN STEEL RANGES



6 Adjustable Flue Strip

In the flue under the patent removable oven bottom is a slide which may be extended or shortened to suit the draft of the chimney or the fuel used. This little feature often causes the Born to work where others fail. It also makes it possible to burn any kind of fuel with uniformly good results.

Many a dealer has found it a valuable aid in making sales and satisfying customers.

If you seek a line that will reduce your troubles and increase your profits, our proposition will be of interest.

The Born Steel Range Co. Cleveland, O.

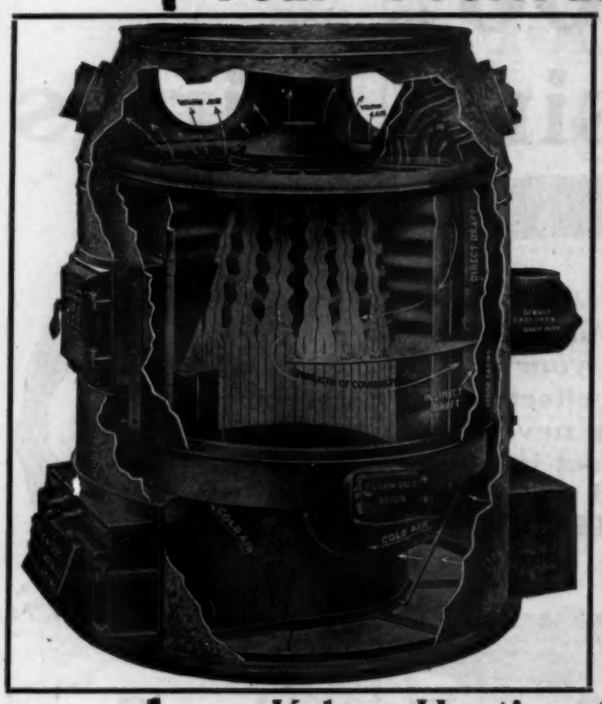
IDEAL FURNACES

Always please the purchaser.
Have great heating capacity.
Burns soft or hard coal or coke.
Large and heavy fire pot.
Gives more heat, with less fuel, than others.
Requires but little attention.
If you want more information about this furnace, write to

THE H. P. DEUSCHER CO.,
HAMILTON, OHIO.

Rely on yourself—invest your money in YOUR OWN business—advertise.

Your "Profit and Loss" Account



Three weeks from today—December 30,—is pretty sure to be a gloomy day with some Heating Men.

Another whole year gone,—and the business showing a profit of mighty small dimensions!—if there is any profit at all!

But the army of KELSEY Agents will have good cause for feeling good,—because we've broken all records for sales, and many KELSEY Agents have reported an exceptionally brisk year,—plenty of contracts at good prices!

If you're dissatisfied with cut-throat competition in the furnace business, let us give you an outline of the KELSEY Exclusive Agency.

We can't eliminate your competitors for you,—but we can give you the details of a plan that will enable you to go after a better grade of Heating Work, in which there is more profit, and which offers much better possibilities for future sales.

Why not start out right in 1906,—make up your mind to show a good profit next December!

You can do it if you'll take the Exclusive Agency for the KELSEY Warm Air Generator.

Shall we send you our Proposition?

"There's Only ONE Warm Air Generator!"

Kelsey Heating Co., Syracuse, N. Y.

New York
156 FIFTH AVENUE

Philadelphia:
Builders' Exchange, 24 S. 7th St.

JAMES SMART MFG. CO., Brockville, Ont.
Sole Makers for Canada.

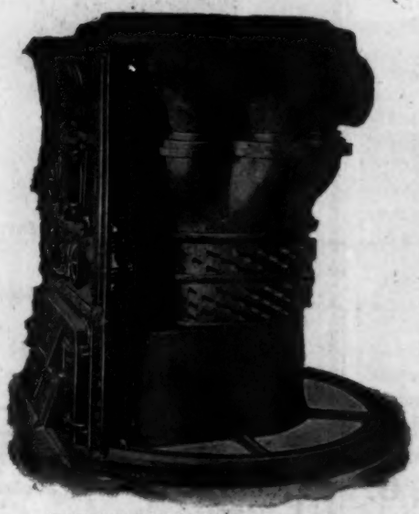
Western Sales Agents:
COOK & VAN EVERA COMPANY
38 East Lake Street, CHICAGO

JOHN KONTNY

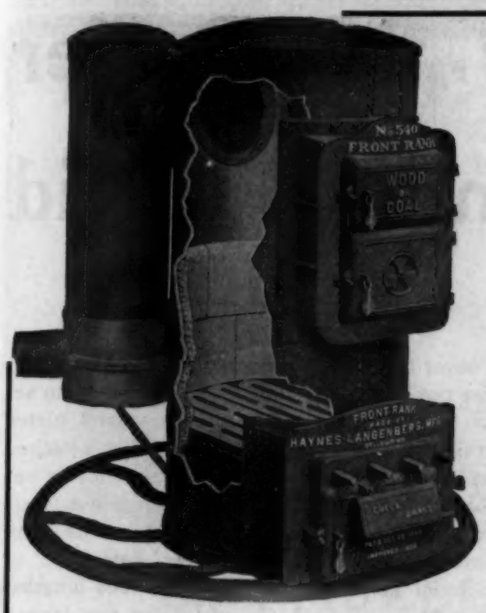
65-67 N. DESPLAINES ST.

CHICAGO

WESTERN AGENT



TRIUMPH KING FURNACE. Five Sizes.
Hard or Soft Coal. Portable or Brick Set.



ACKNOWLEDGING that steel is better than iron for furnaces as well as everything else as almost everybody does—you've got to get down to facts and pick out the best one. We don't ask you to believe us. We ask you to look, to see—To look at our record, our plant, our employes, our customers, our history—But most of all at the

FRONT RANK

10,000

IN USE IN

St. Louis

The Front Rank is the pioneer. Thousands in all sections of the country attest our claims of superiority.

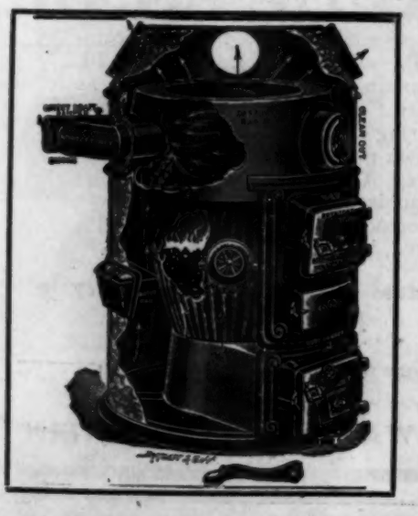
Hard or **SOFT** coal, wood, gas or coke.

HAYNES-LANGENBERG MFG. CO.,
ST. LOUIS, MO.

THE NAME

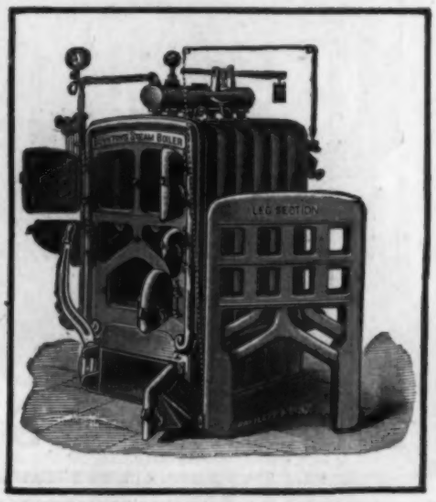
BOYNTON

has an established value when applied to
Furnaces, Steam and Hot Water Heaters.



This has been gained by years of honest value — by giving in 1849, 1860, 1870, 1880, 1890, 1900, 1905 the best heating apparatus made at that time. Our customers know that we keep abreast of the times and are always first in the field with every real improvement.

WRITE US FOR CATALOGUE



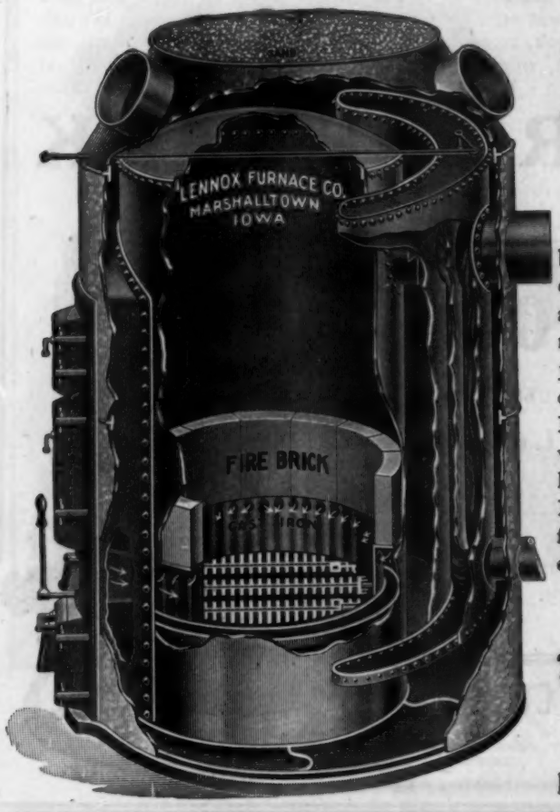
The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO **207-209 Water St., NEW YORK**

The Furnace for the Dealer

is the

Lennox Torrid Zone



because it never leaks gas or smoke through a cracked cast iron fire pot or packed joint and it is as easy to set as a stove. It is a steel furnace of heavy steel plates riveted gas tight under hydraulic pressure—not a packed joint about the job. Fire pot in sections, entirely enclosed. Large double feed doors. Perfect hot blast. Direct and indirect draft. Extra radiator with long vertical smoke travel. Burns hard or soft coal or lignite. Special sizes for wood in four foot lengths. Now sold in 22 States and Canada, from the largest factory in the world for making steel furnaces. We estimate and furnish blue prints for setting.

Write for catalog and terms.

The Lennox Furnace Company

No. 800 Church St., MARSHALLTOWN, IOWA.

One of the Characteristics of the

GILT EDGE RADIUM

is the

Careful Choice and Excellence of Material.

Every inch of metal used is the best the market affords, and is calculated to stand the strength and do the service it is subjected to. The combustion chamber consists of No. 8 and No. 10, gauge steel and not of No. 14 and No. 16, as in the ordinary "Horse Shoe" furnace. The outer casing consists of heavy galvanized iron covered on the inside with a thickness of asbestos fibre. The inner casing is made of bright tin and is separated from the outside casing by corrugated galvanized iron strips. Our apparatus, we can say emphatically, is

Most Effectual and Enduring in Every Particular

See our Catalogue

THE FURNACE MEN

R. J. Schwab & Sons Co., MILWAUKEE, WISCONSIN

From Ogden Johnston & Co., Carbondale, Ill.:

Please take our advertisement out. We have secured results. Your paper certainly reaches the craft. Long may it flourish! 9-5

YOU ARE CAUTIONED

When selecting a furnace, not to commit the error so often made and select it on the size of fire pot only.

A Furnace with a Big Fire Pot May be a Big Waster and Little Heater.

Compare its capacity for getting away with coal, with its capacity for heating rapidly a proportionately large volume of air.

The MUELLER is properly proportioned throughout, insuring the best results, with the least consumption of fuel.

Write us, and we will send you complete catalogue illustrating all Heaters we make.

L. J. MUELLER FURNACE CO.

ESTABLISHED 1857

191 Reed Street - - - - - MILWAUKEE, WIS.

Height over all, 63 inches.

The Stanton

Seamless Warm Air Furnace

Why sell a cheap and inferior line of Furnaces, simply because your competitor does.

There is no money in handling cheap Furnaces. They are sold on price alone, and not on merit. The STANTON SEAMLESS STEEL FURNACE has been on the market for ten years, and many of them in use for that length of time without repairs, and still good.

Write for our catalogues which give full description.

The Stanton Heater Co.

Martins Ferry, Ohio

GREEN'S LOW DOWN

All Cast Furnace has continued to grow in popularity for ten years. It has proven to be more popular this year than ever before. Now just stop and think about that a moment. There must be some reason for it because so many other furnaces have had a very different experience. Besides the Low Down we make five other styles, so you are pretty certain to find what you want. Our prices are very reasonable, and think of the time and freight we can save you. We shall be glad to receive your request for our catalogue and prices.

Green Foundry and Furnace Works

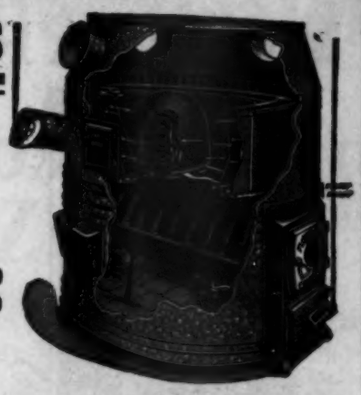
Des Moines, Iowa

Floral City Furnaces

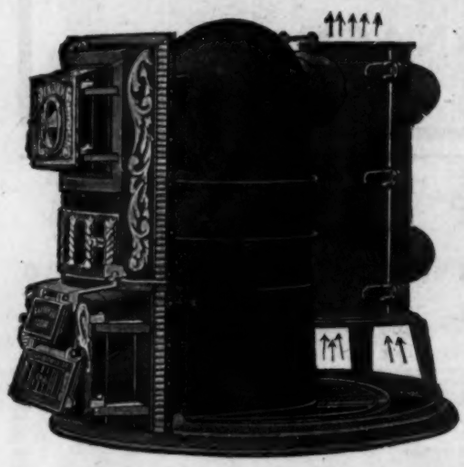
Are strictly up-to-date, old patterns have been relegated to the scrap heap, old methods discarded, but they are in no sense experiments.

EVERY FURNACE IS TIME TRIED AND HAS BEEN THOROUGHLY TESTED

in a climate where the temperature often falls to 40° and 50° below zero. Write for catalogue.



Monroe Foundry & Furnace Co., Monroe, Mich.



Dealers Like the New "Low Down"

CROWN WARM AIR FURNACES

because they

ARE GOOD SELLERS

They are good sellers because they

ARE MADE TO SERVE AND TO LAST

Every inch of material put in is of the best, and made of proportions and with provisions to stand the strain it is subject to. That is why they never crack or warp. All joints are gas and dust tight. The warm air that reaches the rooms is pure and warm, never over-heated or dry. If dealers can get better furnaces we should like to have them prove it to us. Before doing so, however, we would invite them to

See Our Catalog

The MARCH BROWNBACK STOVE CO.
POTTSTOWN, PA.

Here's a Snap for Wide-Awake Range Dealers

I am going to sell 1,000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys busy and foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60 each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you. Every sale leads to another I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED.

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

BOOKS BY MAIL

THE Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

SHEET METAL WORKING. THE FOUNDRY. THE WORKSHOP. HEATING AND VENTILATING. PLUMBING AND DRAINAGE. BICYCLE REPAIRING. THE STORE AND OFFICE.

DANIEL STERN, PUBLISHER and BOOKSELLER, 69 DEARBORN ST., CHICAGO

If you can save *one-third* your customer's coal—and give him more heat—by installing a Shoals Fuel-Saving Attachment in his stove or furnace, isn't it worth investigating ?

And you'll make a handsome profit in every sale, *and Shoals Attachments sell mighty fast!*

Want our Booklet and Agency Proposition?

NATIONAL HEATING APPLIANCE CO.
Sales Department, UTICA, N. Y.
Western Office: 145 LaSalle St., CHICAGO.

MONCRIEF
WARM AIR FURNACE.

Specialties
All Cast Iron.
Moncrief Duplex Grate.
Large Radiating Surface.
Double Fire Pot.
Large Grate Surface.
Top Return Flue.
Simplicity, Durability, Economy.
Cleanliness in Use.

HENRY & SCHEIBLE CO.
6-8-10 Long St., Cleveland, O.
Sales Agent—J. C. KIMMEL, 3114 East 15th St., Kansas City, Mo.

PECKHAM & SMITH,
Marshalltown, Iowa.

Write us;—

We have sold our tools for cash through your paper. Please stop the deluge of letters. Yours is a fine medium to reach buyers.

The New
Lion Furnace

Will be Placed on the Market Jan. 1st.

Besides embodying the usual qualities for which the "Lion" furnace has been noted we have solved in its reconstruction some problems in the manufacture of hard and soft coal furnaces that have puzzled furnace makers for years and have succeeded in making it

AT A LOW COST

We will also be able to furnish our Ohio and Western Penna. trade with an Oak Stove "down draft," which we have thoroughly tested with both soft and hard coal and crude oil. Also a stove which can be used for soft coal and gas.

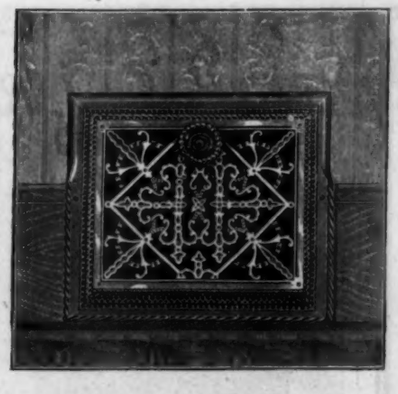
WRITE FOR INFORMATION

YOUNGSTOWN FURNACE & SUPPLY CO.
YOUNGSTOWN, OHIO

WE CHALLENGE COMPARISON
Stowell Side Wall Registers
ARE REGISTERS OF MERIT

Furnished Either With or Without Boxes.
BOXES are easy to place and fit all standard pipe. Largest air space. Attractive design. Our new Side Wall catalogue is worth having if you use or ever expect to use Side Wall Registers.

Stowell Mfg. & Foundry Co.
51-73 Milwaukee Ave., SOUTH MILWAUKEE, WIS.



THE SCHWAB SIDE WALL REGISTER

and register box not only has a larger capacity than any other special side wall register manufactured, where the register box is shipped with the register, but this **CAPACITY IS NOT REDUCED IN A VAIN ENDEAVOR TO UTILIZE ANY PART OF IT AS A VENTILATOR.**

The trade in using the Schwab Side Wall Register may be assured that they are purchasing of a company that has **REFUSED** to sell both furnaces and registers to catalogue houses, and also that in **NO TIME IN THE FUTURE WILL THE CONSTRUCTION OF THESE REGISTERS BE CHEAPENED BY THE USE OE SHEET STEEL,** as this cannot be done and retain its superior qualities, such as neatness of design, a flange to make a tight fit inside the register box, a straight edge to fit the base board against the same, etc.

The Schwab Side Wall Register is especially adapted for the heating of a building under a different system of piping from what has been in general use for the past fifty years. This system was **ORIGINATED PREVIOUSLY TO THE INTRODUCTION OF ANY SPECIAL SIDE WALL REGISTER.** It has been in existence for more than a quarter of a century, but made practical *with the ordinary 4-inch partition* only through the use of *these* registers. Plans for heating residences under this system and results guaranteed where our plans and goods are used.

Write for our catalogue, price list and discount, also our leaflet, "Modern Methodsof Heating Residences," fully describing this system and register.

R. J. SCHWAB & SONS CO., The Furnace Men, MILWAUKEE, WIS.

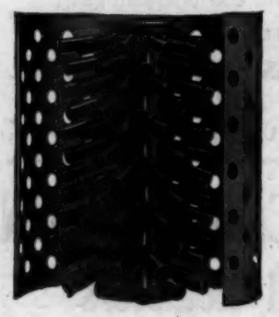
"T & B" REGISTERS

The Old Reliable
The Standard of Comparison

If you want registers **QUICK** remember that our stock, of the best registers made, now consists of **600,000** pieces.

Tuttle & Bailey Manufacturing Company
ESTABLISHED 1846
NEW YORK CHICAGO BOSTON BROOKLYN

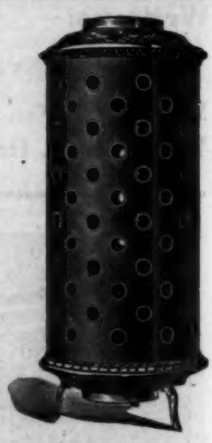
SAVE HALF YOUR FUEL
by using the
ROCHESTER RADIATOR



The Part that Does the Business

Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
For Hard or Soft Coal, Wood or Gas.
Price from $2.00 to $12.00.
One square inch of radiating surface directly over the hot current is better than six in a drum or side heater with perpendicular tubes.
Easily cleaned. We guarantee our radiators not to interfere with, or choke the draught.
Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO. 120 Furnace Street ROCHESTER, N.Y



THERMOSTATS

SPRAGUE DAMPER & VALVE REGULATORS Non-Electric.
10 years in use. Thousands giving satisfaction; they are guaranteed; also Sprague Electrics, and automatic checks for Steam, Hot Water and Hot Air Heaters of all kinds.
HOWARD THERMO. CO., - West, Oswego, N. Y.

GUS WINTERBERG,
Sandwich, Ill., writes:

"Please stop my advertisement for tinner, or furnish me with a bookkeeper, as I cannot attend to all the mail that I receive."

The Jones Side Wall Registers

as we made them in 1902 are being IMITATED by two concerns that we know of, but we have abandoned the CAST FRONTS and CAST REGULATING SCREWS, because the CAST FRONTS BREAK with the heat when placed near the furnace, and

The CAST SCREWS, working in a CAST SOCKET soon WEAR SMOOTH allowing the deflector to drop shut.

Our NEW IMPROVED JONES REGISTERS are made with PRESSED STEEL FRONTS that cannot break, and being polished before they are formed, take a much FINER FINISH than is possible with cast iron Registers. The REGULATING SCREW is made of a twisted STEEL ROD; this is held in place by a BRASS SPRING, which makes the JONES REGISTER more desirable than the 1902 IMITATIONS.

We guarantee the JONES REGISTERS to be perfect in every respect.

A COMPARISON with other registers is sufficient to convince anyone that the JONES REGISTERS are superior to any on the market.

We do not sell to CATALOGUE HOUSES either FURNACES or REGISTERS.

Get our latest Booklet, "ADVANCED METHODS OF WARM AIR HEATING."

Heating plans and itemized estimates furnished free and a positive guarantee that furnaces will work better and consume less fuel when installed in accordance with the JONES SYSTEM of HEATING and VENTILATING.

A No. 30 JONES REGISTER

For heating two rooms on the first floor. Bottom Collar 9½x13¾. Each room is provided with a Ventilator and Deflector.

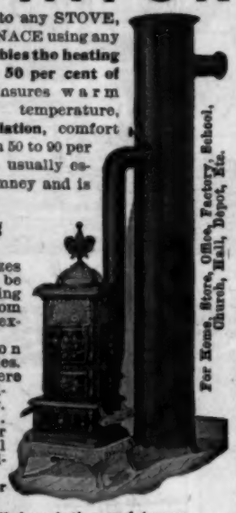
——MANUFACTURED ONLY BY——

THE UNITED STATES REGISTER CO. BATTLE CREEK MICHIGAN.

For sale by legitimate Jobbers everywhere, but not by CATALOUGE HOUSES.

STERLING AIR HEATING RADIATOR

Easily attached to any STOVE, RANGE or FURNACE using any kind of fuel. **Doubles the heating capacity or saves 50 per cent of fuel expense.** Insures warm floors, uniform temperature, **continuous circulation**, comfort and health. From 50 to 90 per cent of the heat usually escapes up the chimney and is utterly lost.



The Sterling Radiator saves and utilizes this heat. Can be used in adjoining room or in room above stove with excellent results.

Constructed on scientific principles. Does not interfere with draught. Always satisfactory. Nothing like it. Neat. No other radiator that will admit of comparison.

A money maker for dealers.

Write for full description and terms.

STERLING AIR RADIATOR CO.
617-60 Wabash Ave., Chicago, Ill.

MUELLER WALL REGISTERS

Simple
Durable
Quickest Installed
Greatest Capacity

We also make a complete line of Floor Registers. GET OUR PRICES.

L. J. MUELLER FURNACE CO.
191 REED STREET Established 1857 **MILWAUKEE, WIS.**

CUT THIS OUT

To the Publishers **The American Artisan and Hardware Record**
69 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town.....State.....

Smith's Hot Water Attachments

Are known from one end of the country to the other. They are used in almost every successful furnace job. They are made in all capacities, from a 30-gallon tank to one carrying 1,000 ft. of radiation. Our booklet tells the story.

CHAS. SMITH CO., 103 Lake St., Chicago.

W. C. T. HAMILTON, Minneapolis, North Western Agent.

Omaha Stove Repair Works, Western Agents.

No matter how cheap a furnace you are able to buy, there are always some others that you can secure still a little cheaper, so if you go in for price only in the furnace business, you will be just as well off to get the very cheapest of all, so far as reputation is concerned. We point the way to better things in furnaces, and in modern and successful methods of installation; to better profits deserved and earned on jobs "that work," to satisfied customers, a constantly increasing business and a good reputation. To furnace merchants who are thinking along this line for 1906, we solicit the opportunity to prove our contention that it pays best to handle a furnace of highest quality, like the Round Oak, and install it correctly by putting things where they belong, if it does cost more. As a noted hardware man says, "Quality is remembered long after price is forgotten." Furnace catalogue sent on request.

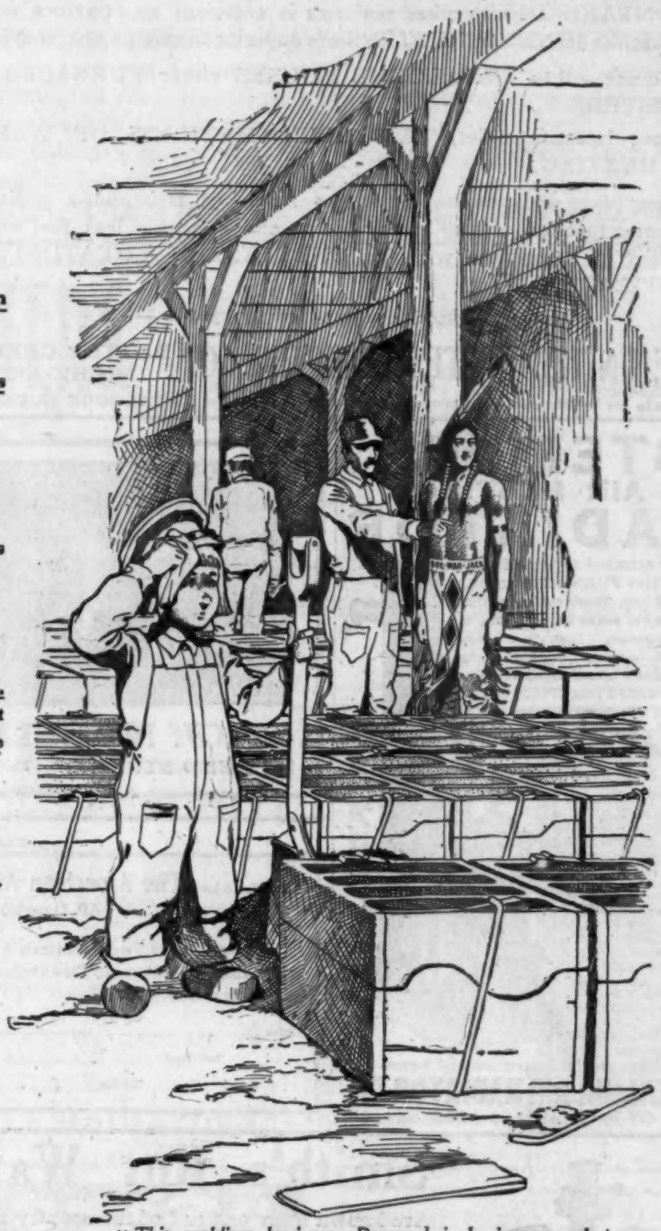
ESTATE OF

P. D. BECKWITH

FRED E. LEE, Manager

Dowagiac Mich.

MAKERS OF GOOD GOODS ONLY



"This molding business, Doe-wah-jack, is sure what you call strenuous."

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, DECEMBER 9, 1905.

IN RESPONSE to an editorial appearing in our November 18th issue in which we announced that we would gladly lend aid in the study of interstate commerce rate regulation, by furnishing information on the subject and sending copies of the Grosscup plan, we have received a large number of requests which have been answered promptly. It is evident that the subject is of national interest and that all shippers are awakening to the fact that, whatever legislation is passed, it should be of a nature to benefit themselves rather than politicians. We announce again that we shall take pleasure in furnishing details to interested shippers. A pamphlet explaining the Grosscup plan in detail will be mailed upon request.

No More Graft.

WHEN the various retail hardware associations were still in their swaddling clothes, a little material assistance from jobbers and manufacturers was necessary. The milk bottle of souvenir program advertising was administered and it fostered the growth of the naturally healthy infants. Various pecuniary difficulties were encountered in making preparations for the annual conventions and to insure the maintenance of the organizations themselves. Inasmuch as the task of persuading dealers to join was difficult enough without advancing the dues, it was found advisable to guard against deficit by soliciting advertisements for the yearly program. In the main, manufacturers and jobbers have been friendly to the movement. They have contributed generously to the advertising pages of these programs.

It is but just to note, however, that these advertisements have not been placed as a business investment. Returns, commensurate with the cost, have not been expected by the advertisers. The contribution was made much as one to a charitable fund. It was to "jolly along" the association, to show that the advertiser was well disposed. An advertisement in a souvenir program is much like the actual bread, not the story-book kind, that is cast upon the waters. The loaf may come back bringing a hundred others. It may come dissolved into a thousand pieces. The chances are one in a thousand that a single iota of the original portion of the staff of life will return. The wild sea waves are huge and hungry. They can swallow a loaf without indigestion. The advertiser who expects returns from program advertising is really quite like the hero of old who sat and waited and waited for the good ship to come home until the incoming tides had risen and risen, higher and higher, when the waters gradually enveloped mouth and nose and the watcher was rocked to the bottom of the emerald deep.

We have no intention of displaying the array of absurdities that program advertising has long been guilty of—the small circulation, the unpaid circulation, the trivial attention that the program invariably receives, the fact that the advertisements are noted at the most unpropitious moment, if they are noted at all, etc., etc. It suffices that actual demonstration shows conclusively that program advertising does not pay and that advertisers realize that fact. With this premise as an axiom, let us proceed.

While many of the jobbers and manufacturers virtually make the yearly gatherings possible by their advertising, they also utilize display parlors. These displays are interesting side shows to the main attraction. Dealers are afforded the opportunity of viewing the actual mechanism of different contrivances and in many cases of meeting personally the man behind the gun. These displays must likewise be regarded as charitable contributions in a great measure. Any profit that the displayer might realize has usually been eaten up by atrocious hotel charges for space.

—

Last January THE AMERICAN ARTISAN broached the suggestion that display booths might be afforded at reasonable rates, while the retail organizations would obtain the necessary revenue, if the latter would rent a large hall for convention purpose and sublet part of that hall as booths for the display of manufactured products. Thus two harpies might be killed with one stone—program advertising, rapacious hotel managers. The idea was cogent. We quote from THE AMERICAN ARTISAN, January 28, 1905, as follows:

> Why should the hotels make from $500 to $1,000 for exhibition space at the various conventions?
>
> Why should not this sum be divided between the retailers and their exhibiting friends?
>
> We believe that if the associations took up this matter and arranged to rent out space in the same building where their meeting was held, the entire trade would be benefited.
>
> (1) The retail association would secure a handsome revenue by charging about half the rate the decent hotels do now.
>
> (2) The chronic complaint that per suasive traveling men spirit members away during sessions to see their exhibits would be largely obviated.
>
> (3) Many makers of specialties would exhibit who are now deterred by the high prices charged for desirable space for exhibits.
>
> (4) It would be easier to start the sessions on time, as

the dealers would be at the combined exhibition and convention hall rather than loitering in the hotel corridors.

Taking up the manufacturers' and jobbers' side.

(1) There would be a material saving in expense.

(2) Every exhibitor would feel that he was contributing toward the financial success of the convention.

(3) The small exhibitor or the late comer who failed to get desirable space would not be obliged to induce dealers to walk 100 feet east then up two flights, then 50 feet north and 80 feet west, to reach his goods.

(4) Many exhibitors under the present regime have to keep their rooms with exhibits therein locked when called away for meals or business to prevent vandalism and petty thieving by bellboys, chambermaids, and other irresponsible outsiders, while with the exhibits bunched in the hall, the annoyance of these greedy poachers would be done away with.

(5) Where a hotel room is used for exhibition purposes and for lodging, as well, the exhibitor, particularly in the morning, is often a victim of the chambermaid's negligence, the overworking of the porter and bellboys, the crowding of elevators, the absence of suitable tables, etc., for showing samples, and cannot give his exhibit the justice he should, and which he believes he could in a special exhibit hall.

Urged on by frequent, subsequent editorials in THE AMERICAN ARTISAN, the various association officers agitated the question. The latest statistics show that, of seven state hardware associations which have thus far reported, five will hold conventions in halls rented for that purpose. The figures speak well for the leaders of the various associations. A genuine spirit of co-operation is shown—a hearty appreciation of past service, a sincere endeavor to extend cordial relations. Manufacturers and jobbers can hardly eliminate the retailer and Mr. Retailer gives evidence that he, too, finds friendly assistance necessary in many ways. Those retail association officials who have lent aid in furthering the convention hall movement may present themselves for a deluge of bouquets.

—

We have one more word of advice for the officials —especially for those who have changed from hotel to convention hall. Our remarks are addressed to the officials of those organizations which have made the change.

Mr. Officer, you know, as well as we and everybody else, that program advertising is a species of graft. You know that the program advertisement does not pay the advertiser commensurately. You know that most jobbers and manufacturers dare not refuse your plea. You hold the whip. You have led them a merry dance.

And you know, furthermore, Mr. Officer, that when your organization could not exist without outside assistance, those philanthropists supported you in a substantial way. You know you don't need that support now. Why levy blackmail?

Perhaps you have heard, Mr. Officer, that at the last meeting of the American Federation of Labor, program advertising was put under a ban. You doubtless realize that as between the two organizations—yours and the laboring man's—yours is the more opulent, the stronger and, presumably, the more virtuous. Is the more virtuous organization also the more covetous? Is your magnanimity less than that of a mechanic who has had small opportunity for ethical and sociological study?

It is probable that inasmuch as the matter has not been taken up by any of the hardware organs thus far, the officials are not properly aware of the enormity of the crime of which they have been unconsciously guilty. Graft and implied blackmail are the serious phases of the question. The relations between wholesalers and retailers in the hardware trade have been so friendly that no decided resistance has been found necessary or desirable by the grieved parties. They have been willing to contribute to a grand end, even though the contribution assumed at times a vicious demeanor.

We have said that five of the retail hardware associations are now self-supporting—have engaged halls which they will sublet as display booths. These organizations require no help in the shape of souvenir program advertising. It is doubtful whether they expect any. In case they do, it is time to call a halt. THE AMERICAN ARTISAN called attention to the graft obtained by hotel keepers. It will not wink at graft secured by others—not even by its best friends, the retailers.

And you, Mr. Manufacturer! You were present at the second Atlantic City convention. Do you remember the resolution, introduced and passed unanimously, calling upon members in a body to eliminate all advertising in souvenir programs? You find it hard to deny a related association, just as we all dislike turning down a poverty stricken kinsman. It is not pleasant to say no. We don't blame you. We are simply pointing out that such assistance is not necessary to-day in the case of at least five retail associations. We feel, Mr. Manufacturer, that trade progress would be better conserved if you should follow the dictates of your more sober judgment as expressed at Atlantic City in 1904. Remember, a wrong is never righted by the one profiting through that wrong.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

John Jones settles in Amsterdam, Nev., and starts a hardware store. Silas Oldbuck has had a hardware store across the street for twenty years. Jones uses progressive methods, opens up a premium and advertising campaign and Silas sells his goods at auction. What happened?

Was it altruism on Jones' part? Did he show an unselfish spirit? Can you condemn him for driving a poor, old, honest man out of business? In Jones' place, would you have stopped advertising, driven customers away and given Oldbuck half of your patronage?

Not on your life! Not if you've got spunk and gumption and the qualities that make for success!

Jones was the stronger. He figuratively knocked Oldbuck down, helped him into his business grave and used the grave as a stepping stone to attain the success he did attain. That's business; that's life.

That's what I meant the other day when I said: "Too few realize that business is fight, fight—fight, from start to finish. Too few realize that it is not an interesting pastime to which the yearly income is

a delightful concomitant. Too few realize that unless you trample over others, others will trample over you; and that the more trampling you do, the greater will be your success, and the more good you will do the world."

It's not milk and honey, but it's true. It's true to a greater or less extent in every life. Rockefeller does a lot of it; so did Shakespeare; so does Roosevelt; so does every great man. Washington came along and eclipsed his contemporaries so greatly that they looked like warts beside a mountain. Every time a man moves up one round in the ladder of success, some other fellow goes down one round.

My point is this: If you start out to be a great writer, a great actor, a great politician, a great engineer, or a great business man, do your level best. Plunge through the line of rivals like a full-back in a football game. Don't stop to pick up a tackler that you've dodged. You've got the ball and the goal's ahead. Succeed in your purpose. Succeed so that all rivals will be dead ones. Then, when you have succeeded, lie down and let others trample over you. That's life, as scientists, not theorists, see it.

There are many pursuits nobler, perhaps, than business and the almighty dollar. In this world, it is just as important, however, to provide food for the stomach, shelter for the body, as sustenance for the brain. Consequently, many mortals are obliged to forego the nobler ambitions and enter business. As I happen to be publishing a hardware paper, as my subscribers are business men, I tell them to succeed in business—to make money. That's my excuse for preaching the almighty dollar—the goal of the successful business man's life.

I say succeed in that which you embark upon. Make that your life work. Make a fortune that will make Rockefeller's look small. Write a book that will make Shakespeare's seem a dime novel. Hunt criminals so skillfully that Sherlock's methods will look like an echo from antediluvian ancestry. Raise the standard. Uplift humanity. That's the way. You don't do it by giving away half your income or writing trash so that the other fellow's contribution won't be turned down by the magazine publisher. You're on earth to do what you can. You're here to raise the standard morally, physically, mentally. Sympathy or altruism are poor weapons.

The above is written in answer to an editorial in The Implement Trade Journal, in which the quoted paragraph is criticized. It is argued that business is pleasure, not fight. I am the last to deny that work is not pleasant. I object merely to the man who holds that happiness is the *summum bonum*—the end of our existence. The pursuit of happiness does not end in happiness. The zealous pursuit of a noble ambition does end in happiness.

You argue that Rockefeller is not happy. Have you ever asked him? Perhaps he is himself the best judge. Listen to his words: "So all my life has been full of happiness. A happy life is impossible if you do not work."

Life is more than the pursuit of pleasure or sensual happiness. Life is energy; it is strength. Listen to *The Business Philosopher*: "Success is the capacity to use and enjoy the fruits of our own industry in the service of others." Here is no backsliding, no monasticism, no epicureanism. It is stern reality. Be industrious yourself; be of service to others. Do both at once. Raise the mark. Invidious carping won't win out. Man was born to be successful—by strenuous effort, not by segregated, fastidious criticism.

The pleasure in business is not to be sought, if one would be successful. When you enter the store, your purpose should be one of fight—fight to get the trade in your community. The pleasure comes from being successful. The best reward, real happiness, comes from a fight well fought.

* * *

A general merchant in Illinois has hit upon a scheme for attracting crowds to his establishment during the dull season. He buys a large assortment of glassware, ranging in price from 75c to $7.00 a dozen. This assortment is placed in the show window of his store. In the front of the window, for about a week in advance of the date, a sign is placed announcing that all customers buying $1.00 or more of merchandise during a stipulated period, can have a choice of any article in the window for 5 cents. A notice to the same effect is inserted in the daily newspapers. In some cases, glassware that is ordinarily sold as high as $1.00 apiece is offered at 5 cents. The fact that much of the glassware is sold at pretty near the ordinary rate is overlooked by the purchasers who think only of the greater values. The dealer has tried the scheme on numerous occasions and invariably finds it to work handsomely.

* * *

In order to prove that there is no absolutely rigid standard of morals, teachers of ethics declare that lying is sometimes justified. When a man lies to save the honor of a girl or for an equally disinterested reason the lie is said to be proper. It sometimes does happen that a lie is not told for the personal advantage of the liar, but it is not often. Lying is usually the result of cowardice. Moreover, the person to whom the lie is told usually discovers that the statement was untrue and contemns the liar.

Lying as a practice is nowhere more to be eschewed than in the retail store. A customer arrives in a hurry to get a certain kind of meat chopper. Let us assume that he asks for the Wide-Awake. The dealhas another, perhaps an inferior one, and offers it with a guarantee that is usually made with the Wide-Awake. The customer takes home "the just as good," and quickly discovers that it has not all the advantages offered by the genuine. The customer realizes that the dealer has told an untruth. On the other hand, the dealer has sold a meat chopper and perhaps made a profit of twenty-five cents. It is doubtful whether the customer will ever revisit that store; he has lost his confidence in the dealer.

* * *

From the Havana, Ill., Democrat I learn that "Fred Miller, the newly married man, was the lucky man that drawed the stove given away at Keley's hardware store on Saturday."

News Siftings

MEETINGS.

Inland Empire Implement & Hardware Dealers' Association—Spokane, Washington, January 10, 11, 12.

American Society of Heating and Ventilating Engineers—New York City, January 16, 17, 18. Headquarters, 12 West Thirty-first street.

Retail Dealers' Hardware and Implement Association of Texas—Dallas, January 23, 24, 25.

North Dakota Retail Hardware Association—Grand Forks, January 30, 31.

Pennsylvania Retail Hardware Dealers' Association—Williamsburg, February 6, 7, 8. Headquarters, Park Hotel.

Wisconsin Retail Hardware Association — Milwaukee, February 7, 8. Headquarters, West Side Turn Hall.

Nebraska Retail Hardware Dealers' Association—Lincoln, February 13, 14.

Indiana Retail Hardware Association—Indianapolis, February 13, 14, 15. Headquarters, Tomlinson Hall.

Iowa Retail Hardware Dealers' Association—Des Moines, February 14, 15, 16.

Illinois Retail Hardware Association—Chicago, February 20, 21, 22. Headquarters, First Regiment Armory.

Connecticut Hardware Association—New Haven, February 27, 28.

Ohio Hardware Association—Canton, February 27, 28, March 1. Headquarters, Great Auditorium.

Southern Hardware Jobbers' Association—Hot Springs, Va., June 12, 13, 14, 15. Headquarters, the New Homestead.

American Hardware Manufacturers' Association—Hot Springs, Va., June 12, 13, 14, 15. Headquarters, The New Homestead.

Retail Hardware, Implement & Vehicle Dealers' Association of Indian Territory—Oklahoma City, Oklahoma, July 10.

Michigan Retail Hardware Association—Detroit, August 8, 9.

The American Lava Company of Chattanooga, Tennessee, announce that the Alco burner is distinctive in construction, reliable in operation and unsurpassed in appearance.

Frederick W. Rogers of the Malleable Iron Range Company, Beaver Dam, Wisconsin, was a recent visitor at THE AMERICAN ARTISAN office. Mr. Rogers 's a welcome guest both because of his wide information and social aptitudes.

The Star Shovel & Range Company, Limited, Vincennes, Indiana, have been incorporated with a capital stock of $100,000. The directors are Edward Watson, Eugene Hack, Anton Simon, Charles Eirhaus and William A. Cullop.

We have received a kind invitation to attend the ninth annual reception and banquet of the Stove Salesmen's Association of Pennsylvania, which will be held at Mayer's banquet parlors, 709 North Franklin street, Philadelphia, on Wednesday, December 20th.

B. H. Cameron is president, S. G. M. Anderson is treasurer and Archer Anderson, junior, is secretary of the Cameron Stove Company, recently incorporated at Richmond, Virginia, with a capital stock of $50,000 for the purpose of dealing in stoves, ranges, etc.

Joseph W. Dana, a traveling salesman for the Charter Oak Stove Company of St. Louis, died recently at his residence in that city. Mr. Dana was sixty-five years old and had served with the company for more than thirty years. He leaves many friends in the stove trade.

In one of the most stubborn fires that the Pittsburgh fire department has handled for years, the five-story building occupied by the Graff Company, dealers in stoves, ranges and mantels, 909-911 Liberty avenue, was destroyed December 1st. The loss on the stock was estimated at $45,000, fully insured.

The secretary of the Malleable Iron Range Company, Beaver Dam, Wisconsin, paid his respects to THE AMERICAN ARTISAN recently, dropping in on his way through Chicago. The Stay Satisfactory range, Mr. McClure's specialty, is very popular in the extreme northwestern sections of the country, where it was recently exhibited at the Lewis & Clark Exposition.

The fight that has been made by Chicago shippers and Governor Deneen of Illinois, resulted in a wide reduction in Illinois freight rates on December 4th. In April, 1905, Chicago shippers became interested in a revision of the classification and schedules of reasonable maximum rates in the state of Illinois and held numerous sessions. Last Summer the Chicago shippers were offered reductions on condition that they withdraw from the fight but the proffer was refused.

The Syracuse Stove Company, with plant at 100-118 North Geddes Street, Syracuse, New York, are about to enlarge their plant by an addition of two stories to the main building. The present plant is three stories in height, of brick construction. The addition will be of the same material. The two new stories will be used for storage purposes and the entire third floor and an addition between the main building and the foundry will be used for manufacturing purposes. It has not been decided when the work will commence.

The Jewel All-Steel Gasolene Evaporator cabinet range has been on the market for twenty-five years. During this time, according to the manufacturers, no Jewel has been sold to a catalogue or mail order house; no Jewel has been made under another name, and no other reason could be assigned for the excellence and the popularity of the Jewel to-day except honest effort and practical experience. The Jewel gasolene range is described in Catalogue numbersixty-four, published by the George M. Clark & Company division of the American Stove Company, of Chicago.

The Pittsburgh Stove & Range Company,Pittsburgh, calls attention to statistics showing that one person in every thousand of the eighty-three millions of people in the United States bought a Pittsburgh stove during the past year. Eighty-three thousand stoves is a goodly number, especially when the hundreds of stove works competing for the same business are considered. The company makes steel ranges, wood cooks, air tight heaters for wood, oak stoves, base burners, cast iron ranges, cannon stoves and natural gas ranges. The trade marks include the Good Luck, the Cinderella and the Tremont.

American Seal Improved stove putty has recently been introduced to the trade by the William Connors Paint Manufacturing Company of Troy, New York. This stove putty adheres firmly to the castings. It

dries quickly, forming an adamantine crust. It is said neither to shrink nor smoke and to make the joint absolutely tight. The company makes a large and popular line of cements for the larger stove, range and furnace manufacturers in this country and Canada and hardware dealers are finding it to their interest to push these goods. They are put up in packages from one pound cans to barrels containing about eight hundred and fifty pounds. The company is now quoting for next year's delivery.

The National Stove Company division of The American Stove Company of Lorain, Ohio, with branches in St. Louis, St. Paul and Philadelphia, announces that the only safe gasoline stove is the Insurance. In this stove provision is made to automatically shut off the gasoline in case the burners are accidentally blown out or a child opens any of the valves. The agencies include Harper & McIntyre Company, Ottumwa, Iowa; F. M. Borden & Brother, 118 to 122 North Second street, Philadelphia; Marshall-Wells Hardware Company, Duluth, Minnesota, and the Pacific Stove Company of Los Angeles, California.

The November issue of the Stove Salesmen's Review brings to mind the ninth annual reception and banquet of the Stove Salesmen's Association of Pennsylvania, which will be held Wednesday, December 20th, at Mayer's banquet rooms, 709 North Franklin street, Philadelphia. The reception will begin at 10 a. m. and continue until 6 p. m. The business meeting of the association will convene promptly at 6:30 p. m. to elect officers for 1906. The banquet will take place at 8 p. m. Prominent speakers have been selected from the members of the association and it has been planned to make the responses helpful to salesmen in a practical way. The committee in charge consists of William F. Habicht, J. P. Wotherspoon and W. G. Withers.

BANNER OIL HEATERS.

Safety, comfort and economy are said to be embodied in the Banner oil heater, the burner of which is shown in the accompanying illustration. It is said to be safe because of the automatic safety stop which prevents the flame from burning too high. The oil heater cannot smoke, it is said, because the stop nut, A, in the accompanying illustration, limits the upward movement of the flame spreader, B. In the same manner the flame spreader B limits the upward movement of the wick. If the holes in the flame spreader become clogged, the flame will be uneven. The gallery C, shown in the acompanying illustration, is detachable for the purpose of cleaning and rewicking.

Smokeless—Odorless.

Banner oil heaters are made in a variety of style and size. Number 1488 is made with a wrought iron base and with a drum attached to the base with thumb screws. This stove has the old style flame spreader without the smokeless device. Number 1940 is similar. Number 1704 has a japanned or nickeled finish with a steel base. The drum tips back for lighting. Numbers 1817, 1724 and 1830 are somewhat similar in mechanical operation. They differ in appearance. Number 1714 has a japanned or nickeled finish, but is made in a different style, somewhat more graceful and a great deal heavier.

These oil heaters are made for the bed room, smoking and bath room, the library, nursery, office, conservatory, camp or cottage. The Plume & Atwood Manufacturing Company, of New York and Chicago, will be pleased to send a small booklet describing these heaters and prices. When writing, kindly add, "Saw it in THE AMERICAN ARTISAN."

PATENT LOCK STOVE PIPE.

The salesman for a newly organized concern brings forward as one of his strongest arguments the theory that an old concern relies upon a reputation built up in the past to sell its goods in the present. The argument sounds well and it is perfectly reasonable to suppose that half a century or more ago a concern got hold of some good invention, covered the country thoroughly with its agents, established an extensive trade and has since managed to hold on to that trade without effecting any additional improvements or bettering its facilities for manufacture.

While this argument applies in many instances, the majority of these old concerns inherit the same vitality that assured their wonderful growth in infantile stages. Hundreds of instances may be cited to prove that not only were the original features of the product of these companies meritorious but that the successors of the founders carried on the work and that to-day the general average is perhaps higher than when the goods were introduced.

A remarkable example of this endeavor for improvement is the case of Hemp & Company, Second and Chouteau avenue, St. Louis, Missouri. The company was established in 1863 and incorporated in 1893. During this period a steady growth in all branches of manufacture is to be noted. No spasmodic outbursts of enthusiasm are apparent on the part of the consuming public but the growth has been gradual. However, it has been none the less marked. At the present time an enlarged factory, the latest machinery, and many individual and practical improvements give them advantages possessed by few manufacturers. Their broad mindedness in regard to the outlay of money for the purchase of new machinery, etc., makes it possible for the company to manufacture the best quality of products at the smallest possible cost.

The line includes patent lock stove pipes, elbows, sheet metal goods and japanned ware specialties, all of which are described in a catalogue devoted to these products.

The Duplex safety lock nested stove pipe is swedged and crimped, easily put together by pressure on a key. It is locked without the use of a hammer or rivets. Other lines include the Cant Slip double lock, Peerless nested, Battle Ax, Galvano patent lock and the Yale. Descriptions are given in the catalogue of Superior corrugated elbows and the Union, Four-

Pieced, Adjustable and other elbows. Mention is also made of reducers, T joints, flue thimbles, roof flanges, stove pipe caps and the Neverbreak all steel cylinder heads and adjustable ventilators.

The company also makes camp stoves, drum stoves, stove drums, head lamps, canteens, bath tubs, oil tanks, ash scoops, etc.

EAST ST. LOUIS IRATE.

The arrest at St. Louis and incarceration of George Berkemeyer, an East St. Louis merchant recently has caused the East St. Louis Retail Hardware Dealers' Association and the Retail Merchants' Association of the same city to declare that they would sever business relationships with their sister city and transfer their allegiance to St. Paul, Minneapolis, or Omaha. The St. Louis license inspectors have been making discriminations and molesting East Side merchants who send their own delivery wagons to St. Louis to purchase goods, the East Siders assert, beyond endurance, and will now take the strongest retaliatory measures.

Mr. Berkemeyer states that he was arrested as he drove off Eads bridge on his way to the stove repair house of A. G. Brauer, 316 North Third street, and locked up at the Chestnut street police station for an hour. He says he offered to pay for a license but was not permitted, and that his request to telephone to his friend Brauer was likewise refused. Brauer finally heard of his incarceration and went to the station and bailed him out.

A special meeting of various hardware dealers' associations was held at East St. Louis following the arrest of Mr. Berkemeyer. A committee was appointed to visit the jobbers of St. Louis and ascertain why such discrimination exists not permitting East St. Louis merchants to drive their wagons into St. Louis and purchase goods under the same privileges as St. Louis merchants enjoy. In the event of the St. Louis officials refusing to revoke the order to arrest East Side dealers who come without vehicle license a resolution was passed to transfer all trade to other cities. Salesmen from several towns were on hand offering inviting terms for establishing business connections with their cities.

RIVAL CLERMONT.

It is not uncommon for a stove dealer to receive a visit from an old customer, who has recently perused the catalogue of one of the great mail order houses and who is quite worked up over some of the seemingly startling reductions in price. The lady calls to find out what the dealer has to offer and why he has so long overcharged her. The dealer answers that the stoves and ranges offered for sale by the retail mail order houses are vastly inferior in construction and appearance. The body is light and the general mechanism entirely out of date. The lady, however, fails to realize that a difference of fifty pounds in the weight of a stove is of paramount importance. She believes that one oven will bake as well as another and that fire pots are much alike. In instances of this kind, which are confessedly numerous, the dealer is entirely at bay if he cannot show the customer a stove or range which is conclusively and overtly better than that shown in the catalogue. In order to effect a sale, he must prove that his stove is absolutely superior in point of construction, mechanism and appearance to those offered at a lower price. The matter is somewhat difficult. The fine points in the construction of stoves and ranges are often lost sight of by the intending purchaser.

The Gem City Stove Company of Dayton, Ohio, offer a remedy in their Rival Clermont steel range. In their opinion the Rival Clermont is essentially different from the catalogue house products. Their aim in manufacturing this stove was to produce a heating apparatus, the construction of which was so much better than the construction of any other stove as to make its substantiability and durability evident to even the most ignorant user. The endeavor is to prove both by the actual experience of purchasers and by the mechanical construction of their oven and fire box that the range will save one-third of the fuel necessary for other ranges. In appearance the Rival Clermont speaks for itself. Its handsome and roomy reservoir entirely surrounded by cast iron is graceful and symmetrical. The pattern on the front of the reservoir meets with the approval of artistic critics. It is handsomely ornamented with nickel, which, however, is not over rich or over weening. The body of the range is made of heavy wrought blued steel of double thickness, interlined with heavy asbestos board to prevent unnecessary radiation.

The Gem City Stove Company of Dayton, Ohio, publish an interesting circular regarding this range, which they will be pleased to send to dealers mentioning THE AMERICAN ARTISAN.

THAT COMMITTEE.

To THE AMERICAN ARTISAN:

I have felt that the joint committee of retailers and jobbers was a hindrance more than a help to the settlement of the catalogue house question. Your editorial in the November 25 issue hits the nail on the head. The argument against boycott in general is a good one. The plan I have always advocated is to show the people in the community why local dealers can supply their needs better than the catalogue houses. If you prevent the catalogue houses from getting the standard brands, they will merely establish factories of their own. Nothing in the wide world is gained. The demand on the part of the community exists and the catalogue houses will fill it. You can't prevent them by cutting off their supply.

Take a tinner, for instance. If the manufacturers should all decide to sell no more furnace piping or elbows to the ordinary tinner, he would make pipes of his own. Not many of them would stop fitting furnaces. If the catalogue houses cannot buy planes, hatchets, chisels or saws from manufacturers, it won't take them till doom's day to decide to build a factory themselves where they can buy these things.

In my opinion the game is to educate the users, to show them that the legitimate retail dealer has a better stock, offers it at just as good prices and will treat his customers better than the catalogue house a hundred miles away. A campaign of education, of advertising, of the distribution of facts and not theories and not a campaign of unnatural restriction is what we are after. Let the jobbers and retailers get together and change the personnel of their committee. I don't stand for campaigns that are conducted under the bed.

"RETAILER."

The Hardware Record.

American Hardware Manufacturers' Association.
Pres., F. S. Kretsinger, Cleveland.
Vice-Pres., C. W. Asbury, Philadelphia; George W. Corbin, New Britain; William M. Pratt, Greenfield, Mass.
Advisory Board, Julius C. Birge, St. Louis.
Ex. Com., Robt. Garland, chairman, Pittsburgh; Samuel Disston, Philadelphia; John E. Harbster, Reading; William H Hays, Pittsburgh; W. M. Taussig, New York City; C. F. Carrier, Elmira, N. Y.; Edward Ingalls, Newark; Edward M. Kemp, Chicago.

Arkansas Retail Hdw. Dealers' Assn
Pres., T. B. Stewart, Newport.
1st V.-P., R. P. Allen, Van Buren.
2d V.-P., W. E. Dean, Portland.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com. (till June, 1907), Hamp Williams, Hot Springs; R. F. Rays, Russelleville; J. P. Simpson, Malvern; J. R. Mott, Helena; (till June, 1906), Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville; J. M. Pittman, Prescott.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Glessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago, Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Ray, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V.-P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec.-Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; H. J. Breckenridge; Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C. Frederick, Owensboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. H. Whitney, Merrill.
V.-P., E. B. Standart, Holland.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan; John Popp, Saginaw; J. B. Sperry, Port Huron; C. M. Alden, Grand Rapids; J. H. Murray, Cadillac; George P. Griffin, Albion; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., H. R. Schroeder, St. Paul.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St Peter.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., W. S. Wright, Omaha.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; A. J. Bihler, Pittsburgh; P. E. Strauss, Boston.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A. H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

Nebraska Retail Hdw. Dealers' Asn.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walters, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H. Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A. L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer, Dayton; C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J. E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, Mckees Rocks; Geo. V. Thompson, Mt. Jewett; Pa.; Geo. L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft. Smith, Ark.
1st V.-P., J. S. Warren Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville, Fla.
Sec.-Treas., C. B. Carter, Knoxville, Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove.
Secy. & Treas., J. W. McManus, Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T. T. Clark, Ennis; H. S. Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Marcos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine; H. J. Kreuger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 43 inclusive.

E. M. Ellingston and others are the incorporators of the Des Moines Combination Tool Company, capitalized at $1,000 at Des Moines, Iowa.

The Young Hardware Company and the Southern Supply Company of Mobile, Alabama, have called a meeting of the stockholders of the respective corporations with a view of consolidation.

The Denver Machinery & Tool Company of Hoopeston are moving their plant to Gray's Lake, Illinois. Substantial inducements were offered and the capacity of the plant will be enlarged.

The Flexible Bolt Company of Hockessin, Delaware, has been incorporated to manufacture and deal in iron and steel and to manufacture bolts, chains and metal devices. The capital stock is $200,000.

John McCrory, A. M. Jones and James McCrory are the incorporators of the McCrory Wire & Nail Company recently organized at Elwood City, Pennsylvania. The company will soon erect a factory.

Lyons & Warr, dealers in hardware, sporting goods, implements, etc., and M. E. Keizur, dealer in general merchandise, furniture, etc., have united and formed a mercantile company for the operation of a department store at Weiser, Idaho.

J. Frank Barr, secretary of the Nebraska Retail Hardware Dealers' Association with office at Lincoln, Nebraska, is preparing the program for the fifth annual convention of that organization which will be held at Lincoln, Feb. 14, 15 and 16.

John P. Milliken, number 560 Willoughby Avenue, Brooklyn; Chas. H. Siebert, number 1 Union Square, and Jere Wood, number 277 Broadway, are the incorporators of the John P. Milliken Company, capitalized at $20,000 to manufacture window and door screens and weather strips.

The United States Rule & Level Company has been incorporated at New York with a capital stock of $75,000, to manufacture patent rules and levels. The incorporators are Everett C. Wigham, 465 Hamburg Avenue, Brooklyn; Horace B. Wigham, Norwalk, Connecticut, and Herman Schlosser, 1377 Jefferson Avenue, Brooklyn.

The Union Steel Screen Company of Jackson, Michigan, are about to move to Albion. Machinery is being installed in the new plant and the officers hope to be permanently settled shortly. The company manufactures sand and coal screens, elevator inclosures, oven racks, wire and iron work, etc. It also makes the Union interlocking system of concrete reinforcement.

Henry Iwan, the well-known manufacturer of drain cleaners, chimney ventilators, post hole diggers, etc., at Streator, Illinois, recently celebrated the twenty-fifth anniversary of his business career. He arrived in Streator Nov. 16th, 1880, and was soon followed by his brother Louis. The firm commenced manufacturing post hole augers and mining tools on a small scale, gradually increasing their capacity. The

goods now manufactured by the company are used extensively in the United States and in other sections of the globe.

The Garver Hardware Company of Des Moines, Iowa, have completed their new building at 707-711 Locust Street, which they will occupy in the near future. The company was established in 1876 by J. A. Garver, the present president. It has been very successful. The building is one of the finest West of Chicago. It is almost absolutely fire proof. Part of the building will be rented out.

The Appleby Company of Saginaw, Michigan, have published a new directory of the rural mail delivery system. It includes a list of people living in the mail districts of Cuyahoga, Lorain and Medina Counties, Ohio. The head of the family and the name of each member is given, together with the distance the patron lives from his postoffice, name of the township, whether he is a land owner or tenant.

Nearly three hundred wage-workers, former union men, threatening to strike for the open shop and against a union agreement is the unusual condition reported by W. M. Webster, secretary of the United States Glass Manufacturers' Association which is fighting the Amalgamated Glass Workers' Union in forty small factories. More than six hundred unionists struck several days ago. About half returned to work on condition that the employers would not make an agreement with the union.

F. R. Switzer, 115 Genesee street, Utica, New York, is sending an advertising card to retailers, gotten up in his bright, convincing style explaining the advantages of circularization to the five hundred or the thousand people in the hardware dealer's vicinity. On this card Mr. Switzer advises the dealer to tell about his enameled ware, baking dishes, kitchen utensils, carving sets, basting pans, etc. Mr. Switzer knows hardware. He is an exclusive hardware advertising agent. Moreover; he seems fitted naturally for his vocation.

At a convention of the State Retail Grocers' & Butchers' Association held in Akron, Ohio, on December 5th, the members put themselves on record as opposed to trading stamps and the parcels post. The trading stamp was described by a speaker as "one of the worst curses that ever happened in this state or any other state." Another speaker suggested that inasmuch as the parcels post "is growing stronger constantly, we must bend every effort toward its defeat." A resolution was prepared praying Congress to repeal the national bankruptcy law.

The Illinois Central Railroad has issued a two hundred and forty page booklet, giving a list of desirable locations for industries in the states of South Dakota, Nebraska, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Mississippi, Arkansas and Louisiana. Information of a statistical nature is given of the principle cities and towns along the Illinois Central and the Yazoo and Mississippi Valley roads. The list is complete and offers valuable information. It will find special favor with manufacturers and others who are desirous of keeping in close touch with manufacturing business in different parts of the country. J. C. Clair, the industrial commissioner of the Illinois Central, with headquarters at the Central Station, Chicago, will be pleased to furnish additional information.

The committee having in charge the arrangements for the next annual meeting of the Ohio Hardware Association, met at Canton recently and perfected plans. The convention will be held February 27, 28 and March 1. It is planned to have exhibits from all over the United States. These will be displayed in the corridors of the Auditorium, which will be the convention headquarters. Sessions will take place in the morning and afternoon, and in the evening banquets and social festivities of various kinds will enliven the occasion. W. L. Jacobs of Youngstown is chairman of the committee.

The stockholders of the Reliance Edge Tool Company, Youngstown, Ohio, met recently and organized with the election of the following list of directors: E. L. Brown, Walter A. Beecher, George E. Dudley, Robert Bentley and John C. Wick. The directors met in turn and elected the following officers: President, E. L. Brown; vice-president, W. A. Beecher; secretary and treasurer, D. E. Dudley. The capital stock of the company is $75,000, and it has about completed negotiations for the purchase of three acres of land. Approximately one hundred and twenty-five men will be employed when the plant has been completed.

John R. Sower, the secretary of the Kentucky Retail Hardware & Stove Dealers' Association, with office at Frankfort, announces that a meeting of the Executive Committee will be held in Louisville, December 13th, to perfect arrangements for the next annual meeting of the association. This meeting will be held some time in February but the date has not been decided upon. The members of this committee consist of the president, J. C. Frederick, Owensboro; first vice-president, U. S. Shacklett, Fulton; second vice-president, George W. Buck, Louisville; secretary, J. R. Sower, Frankfort, and the treasurer, J. Steitler, Junior, Owensboro.

Ben Blum has withdrawn from the Blum Hardware Company, Galveston, Texas, and on the first of the new year will go into the hardware business for himself under the name of Ben Blum & Company. A three-story brick building at number 2309-2311 Strand, has been leased for a term of years and stock is now being ordered. The new house will be equipped with a stock of heavy, shelf and builders' hardware. Mr. Blum has been prominently identified with the hardware trade for over thirty years. The new firm will engage in a wholesale and retail trade. The Blum Hardware Company will continue in business at their present quarters.

A report presented at the fourth quarterly meeting of the directors of the Retail Hardware Dealers' Mutual Fire Insurance Company of Minnesota, shows that the return premium on policies expiring in 1906 will be forty per cent. On January 1st, 1905, the cash on hand amounted to more than $46,000. On November 23, the cash on hand amounted to almost $63,000; the total assets to $65,000 and the total liabilities to $22,000. The increase in assets during 1905

amounted to $17,000 and the increase in surplus to almost $11,000. The ratio of losses to premiums is twenty-seven per cent and the ratio of expense to premiums is twelve per cent. This is perhaps the most satisfactory statement that has ever been made by a hardware insurance company.

The Promotion Committee of the Illinois Retail Hardware Dealers' Association is composed of W. H. Bennett, Chicago; R. R. Elliott, Springfield; John LePage, Peoria; Charles Smith, Chicago, and E. C. Loomis, Chicago. On behalf of the committee, W. H. Bennett is sending a circular letter to dealers in the state. In the letter Mr. Bennett explains that at present a few perform the work which benefits those who are not members of the association. The committee believes it to be the bounden duty of every dealer in the hardware trade to put a shoulder to the wheel and assist in this work. The next convention will be held at the First Regiment Armory, Chicago, on February 20, 21, and 22. It is promised that this will be the convention of conventions. Enclosed with the circular letter is a membership application blank.

The industrial department of the Erie Railroad, 21 Cortlandt street, New York City, has recently published a list of the plants which have located on the line during the fiscal year ending June 30th, 1905. This list does not include a number of ice and wholesale houses, grain elevators, cold storage houses, etc., forty-seven of which establishments located on the line during the year. Manufacturing plants alone are included and of these there are a large number. Two hardware manufacturing establishments—the Garside Manufacturing Company of Patterson, New Jersey, and William Hjorth & Company of Jamestown, New York, are among the number. Luis Jackson, the industrial commissioner of the Erie, is a pioneer in his line and has done much for building up the freight departments of the road he represents.

G. R. Lott, secretary of the Chicago Retail Hardware Association, announces that this organization will meet until further notice on the second Friday of each month at the usual place, Hall 412, Masonic Temple. The last Friday has been the day heretofore. This change was made upon request of the members at the last meeting. The annual meeting of the association was held December 8th, at which the reports of the officers were presented and the officers for the ensuing year elected. On January 12th, the association will give a stag party in place of the regular business meeting. It is the intention of the committee having this affair in charge, to leave nothing undone to make this the greatest and most pleasurable occasion ever tendered by the association. G. R. Lott announces that he is ready to give practical reasons to hardware dealers of the state who are not members of the state association, why they should join that body.

A NEW SPECIALTY.

There are a number of reasons why progressive hardware dealers are getting out of the rut formed by their fathers and grandfathers, and deepened by themselves. It is not always necessary for dealers to persist in selling staple articles of hardware, never bending to the popular whim, to the different seasons of the year or to the inventions of the decade. Specialties of one kind or another almost never prove failures in a financial way and even though the gain be almost nil, there is much advantage to be gained by

Youth's Bench.

creating the feeling that this particular store is headquarters for different up-to-date specialties and for a great many things out of the line of strict hardware.

The accompanying illustrations show specialties that are not only handled by many dealers but which have invariably proved profitable. They are the manual training benches that one sees in schools, in basements

Youth's Bench with Cabinet.

and on figurative Christmas trees. There is a heavy demand for this article of furniture and with the increased attention that is now being paid to industrial education, there is little doubt but what the market will grow.

The Grand Rapids Hand Screw Company of Grand Rapids, Michigan, are making a specialty of youth's

Youth's Single Vise Bench.

benches for manual training and home use and call particular attention to their line. There are a number of reasons why the company is in a position to furnish at reasonable prices some of the best benches that can be made. Their facilities for manufacturing are of the best variety. They have had twelve years' experience in this class of work; they are probably the

largest manufacturers of benches in the world; they have unusual facilities for acquiring the best stock at low prices; they offer a complete line of manual training benches, more complete than any ever placed on the market.

The frame, glued-up top, vises and tool rack of their youth's benches are made of hard maple. Where wood vises are used, the bench screws are one and one-half inches in diameter and are fitted with patent saw cut threads. Unless otherwise specified, all benches are shipped knocked down, securing lowest possible freight rates.

The company has recently issued catalogue number nine, which describes the full line, including hand screws, cabinet makers' clamps, cabinet makers' benches, carvers' benches, manual training benches, saw tables, factory trucks, and other factory furnishings.

Requests for this catalogue, addressed to the company at 160 South Ionia street, Grand Rapids, Michigan, will receive prompt attention.

ALMOST A CENTURY.

Most all of the great carpenters' tools manufacturing concerns have been offering products to the consuming public for a long period of years. The Ohio Tool Company of Columbus, Ohio, and Auburn, New York, are no exception to the rule. For nearly a century their factories have been turning out products, and mechanics generally are familiar with the quality of their manufactures. The company has received awards at all international exhibitions at which their products have been shown, including the highest award given on carpenters' tools at the Paris exposition in 1900. They are the sole owners of the Auburn Tool Company and the New York Tool Company. Also the brands owned and used by these concerns.

Adjustable Drawing Knife.

They call particular attention to the simplicity and strength of their Improved adjustable handle drawing knife shown in the accompanying illustration. A drawing knife is ordinarily large and cumbersome. It occupies much space and thus presents a broad surface for injury to the blade. An arrangement such as shown which will permit of the drawing knife being concentrated so as to fit conveniently in a tool box, will commend itself to mechanics and practical tool men. The ratchet allows the handles to be set at any angle to the plate that may be required. The blade is extremely sharp and the handles are made of imitation cherry, handsomely stained and hand polished. These drawing knives are packed one-fourth of a dozen in a box.

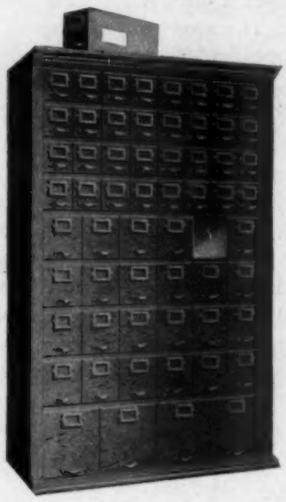
This drawing knife, together with the other drawing knives manufactured by the company, its immense line of planes, plane irons, chisels, gouges, auger bits, handles, bench and hand screws, wood and edge tools, are fully described in catalogue number twenty-one, published by the company. This catalogue will be furnished to members of the trade who mention THE AMERICAN ARTISAN.

CATALOGUES WANTED.

The Gregg & Case Company, wholesalers at 48 Cadillac square, Detroit, Michigan, are in the market for builders' hardware, mechanics' tools, building paper, roofing, roof paint, roof brushes, and carpentry and building supplies. They will be pleased to receive catalogues and price lists from manufacturers of these products.

HELLER'S PLUMBERS' CASE.

W. C. Heller & Company, Mont Claire, New Jersey, have appointed as their Western agent George W. Heiland, 213 Washington Street, Chicago. Mr. Heiland will handle Heller's steel hardware shelf boxes, screw cases, plumbers' rust proof cases and mice proof seed cases.



Safety Case Number 1761.

The accompanying illustration shows Heller's plumbers' safety case number 1761. It contains sixty steel dust-proof drawers. With its steel back, the contents will not rust or tarnish and the drawers being dust-proof, the contents will remain in the same condition as in the original package. Each drawer is fitted with a strong pull and a bronze card clip. The case is twenty-eight inches wide, eleven inches deep and forty-one inches high.

Case number 1800.

Mr. Heiland handles Heller's dust-proof plumbers' case number 1800. This case contains twenty-eight steel drawers, including divisions so that the entire number of drawers can be divided into fifty or more compartments. This case likewise has a steel back and dust-proof drawers and the drawers are fitted with pull and card clips. It is very convenient for bolts, screws, washers, etc.

Heller's Standard steel hardware shelf boxes have oak fronts and are varnished in a rich antique finish. These boxes will fit in standard hardware shelving with openings thirty by six by twelve. On the side of each box is a card clip upon which may be noted the cost and selling price of the contents.

Further information will be furnished by either George W. Heiland or W. C. Heller & Company. When writing kindly add, "Saw it in THE AMERICAN ARTISAN."

CONSULAR REORGANIZATION.

In view of the resolutions on the consular service, passed by the National Hardware Association and the American Hardware Manufacturers' Association at the recent Washington conventions, the following report on the contemplated reorganization of the Belgian consular service may be of interest. We are indebted to Consul McNally of Liege:

The question of Mondale expansion is seriously agitating certain of the Belgian journals, which endeavor to point out the most important requirements for so doing. They put forth as a necessary and most powerful requisite the reorganization of the consular service, which they emphatically declare to be the most powerful factor in placing the standard of Belgian products not only in new fields, but in those whose markets are already established and where it is necessary to meet the keenest competition. In fact, this latter condition is the all-influencing principle in the proposed formation of a consular system that will win for its vast industrial and commercial output in countries now controlled by those of other nations. The position of Belgium in the matter of imports and exports, which per capita is the greatest in the world, is an encouraging factor in forcing her on to a further endeavor.

The consular service rather than a diplomatic one is thought to be the proper step in the trade expansion that her standing commercially demands. A committee was appointed to formulate a system in keeping with her capacity, and this committee has recommended certain important changes. The personnel of the Belgian consular service as it exists at present is 509 honorary consuls, who are not salaried, and but 31 consuls and 32 vice-consuls of career. Of the number of consuls more than half, or 18, are diplomatic agents. The committee urges an increase in the consular service, limiting the work to commercial and industrial inquiries, which they consider of much more importance than those exercising diplomatic functions. It is further specially recommended that the consular officers be liberally paid in a manner that will permit them to maintain a suitable rank and put them upon an equality with other countries and to be supplied with whatever is necessary to accomplish this end. The appointment of competent commercial and industrial counselors to advise the consular officers, when such advice is necessary, is also suggested, this appointment to rest upon the recommendation of the consul. It is further suggested that the consular officers be supplied with all the latest commercial and industrial reports and that they be expected, with the aid of industrial and commercial persons interested, to organize abroad Belgian chambers of commerce and museums or any other board of system that will tend to increase foreign trade. The government is requested to publish consular reports as speedily as possible. The colonial section is inviting propositions and has many under consideration. They are giving the matter the greatest consideration.

RETAIL HARDWARE DOINGS.

NEW FIRMS.

Charlotte, Md.—Core Hardware Company; capital stock, $125,000; incorporators are G. M. Core, L. L. Caudle and F. M. Redd.

Pekin, Ill.—Frank Brown.

Hudson, Ill.—George Lentz.

Akron, N. Y.—E. M. Sherwood.

Kendalville, Ind.—F. A. Reynolds.

Maple Grove, Wis.—J. P. Sheahan.

Milford, Conn.—The Milford Hardware Company; capital stock, $5,000; incorporators are George B. Clark, George J. Smith and Frank M. Thomas.

South Deering, Ill.—E. S. Edman.

Birmingham, Ala.—Dimmick Mercantile Company; capital stock, $10,000; incorporators are F. D. Dimmick, A. J. Bowron and others.

Birmingham, Ala.—Cunningham Hardware Company; capital stock, $30,000; incorporators are James Cunningham and James T. Cunningham.

Buffalo, Kan.—Buffalo Hardware & Furniture Company; capital stock, $10,000.

Ephrata, Wash.—The Kelley-Hill Hardware Company.

Banks, Ore.—The Williams Hardware & Implement Company.

Pendleton, Ore.—W. W. Beadley.

BUSINESS CHANGES.

Glasgow, Mo.—A. & B. Heying succeed Ben Heying.

Salt Lake City, Utah.—The Monarch Hardware Company succeed Brubaker-Campbell Hardware Company.

Kelley, Kan.—Hang & Stueven succeed Hoyt & Green.

Mounds, Ind. Ter.—Noel Hardware Company succeed Mounds Supply Company.

Beattie, Kan.—Wm. Wuester succeeds Potter & Wuester.

Bloomfield, Neb.—H. Bayer succeeds H. Blanchard.

Centerville, S. D.—Creighton & Son succeed Jackson & Creighton.

Blaine, Wash.—J. T. McAneny succeeds C. B. Hovey & Son.

Stephenville, Tex.—H. L. Snapp succeeds W. H. Frey.

Hoyt, Kan.—K. E. Rupp succeeds W. B. Allen.

Sedgwick, Colo.—I. H. Wallace succeeds G. A. Waddington.

Ida Grove, Ia.—C. F. Nelson succeeds Wm. Colvin & Son.

Bedford, Ia.—Stephens & Taylor succeed Martin & Stephens.

Hooker, S. D.—E. J. Satter succeeds Satter & Hanson.

Mokena, Ill.—Mr. Neithammer succeeds Mrs. Zahn.

Marathon, N. Y.—W. Earl Seamans and Swift's Sons succeed Arvice C. Johnson.

Hutchinson, Minn.—Henry Engdall and C. C. Nelson succeed L. E. Peterson.

Orien, Kan.—J. A. Danielson succeeds The S. Seybold Hardware Company.

Story City, Ia.—T. T. Holm succeeds Henderson & Henderson.

Edgerton, Wis.—J. D. Hain Estate Hardware Company succeed T. A. Warren.

Gloucester, Mass.—Frank E. Smothers succeeds Cyrus Story.

Galva, Ill.—A. A. Snider succeeds Pratt & Johnson.

Winn, Me.—Laforest Cushman succeeds Albert Dennis.

Chattanooga, Tenn.—Slater M. Varnell and Walter J. Varnell succeed Singleterry & Morgan.

Sterling Ill.—Mr. Argraves succeeds Blodgett Brothers Hardware Company.

Fabius, N. Y.—Arthur Gallinger succeeds E. H. Rowley.

Fort Dodge, Ia.—Shepard Hardware Company succeed the Craft Hardware Company.

MISCELLANEOUS.

Eau Claire, Wis.—John Oyass; fire loss.

Newark, N. J.—R. Neumann Hardware Company; addition.

Miles City, Mont.—Montana Hardware Company; destroyed by fire; loss $5,000.

Crotherville, Ind.—J. L. Beldon; burglarized.

Dexter, Kan.—B. H. Ward; new building.

Alden, Ia.—W. R. Cox; destroyed by fire.

Mobile, Ala.—Cunningham Hardware Company; capital stock increased from $30,000 to $90,000.

Birmingham, Ala.—Byrum & Butcher Hardware Company; addition.

Burney, Ind.—Minor & Sons; destroyed by fire; loss $8,000; insurance $2,300.

Lebanon, O.—W. E. Stockton; bankruptcy; assets $3,000; liabilities $2,000.

Lincoln, Kan.—Troup & Robinson; destroyed by fire.

Manheim, Pa.—Litzenberger Hardware Company; burglarized.

Coral, Mich.—Baldwin Hardware Company; burglarized.

Manistee, Mich.—Aibert Kretzer; bankruptcy.

Newton, Ill.—James S. Riley; bankruptcy; assets $1,200 and liabilities $2,000.

Chatsworth, Ia.—W. M. McCall; assigned.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The Thanksgiving advertisement of O. W. Johnston is worthy of more than passing attention. The accompanying illustration is reduced about one-half, the original advertisement occupying a full newspaper page. The type in the original was larger but that shown in the reduction is not much smaller than that employed by many dealers who aim to give the history of their firm from its foundation in a half-inch double column space.

In arranging a page advertisement, care must be exercised to properly differentiate the different goods brought before the readers' attention. Rules are employed and these are often effective, but in making use of rules it is well to use them only as borders. To

illustrate, we believe that the black lines under *Prepare for Thanksgiving, Fix up the Dining-room, Moore's Air Tight Heaters,* could have been omitted to advantage. They do not emphasize any portion of the advertisement and in this case serve only to confuse the reader. We believe also that the black border around the whole advertisement could have been left out with propriety.

The advertisement of Austin, Litchfield, Illinois, is of a similar nature. Mr. Austin is a little more experienced in this line of work than Mr. Johnston, but a comparison of the two advertisements shows that Mr. Johnston, while being a trifle inexperienced in the art is by no means a novitiate. Mr. Johnston believes in letting facts speak for themselves. He quotes figures to prove what Mr. Austin proves or attempts to prove by arguments. The arrangement of the different sections or departments of Mr. Austin's advertisement is better than that of Mr. Johnston's. His advertisement is more symmetrical. Nevertheless, we believe that Mr. Johnston's advertisement is of a nature to appeal more readily to the consuming public than Mr. Austin's, primarily because of the smaller type that the latter employs. Small type may be used in a book or a small circular but not in a page advertisement that the reader must scan when it is extended at full length. While some people read newspapers on a flat table large enough to take the whole of the newspaper lying open, most readers "read while they run." The tramways and the restaurants witness more than half the attention paid to the daily paper.

Mr. Johnston's advertisement is better for practical purposes than Mr. Austin's but is neither so artistic, nor so ingenious. Mr. Austin's advertising specialist is a bright man and his arguments are good. He transgresses, however, when he fills up his advertisement with small type. Both of the advertisements are far above the average.

Heating and Ventilating

K. M. C. PACKLESS DIAPHRAGM RADIATOR VALVE.

The accompanying illustration shows a Packless Diaphragm radiator valve, used with the Kellogg-Mackay-Cameron vacuum system, Morgan patents, manufactured by the Kellogg-Mackay-Cameron Company of Chicago. This valve is an admirable contraption and is recommended for all heating systems. Its opening or closing is brought about by the movement of an internal brass diaphragm.

K. M. C. Diaphragm Valve.

The usual stuffing box and packing are done away with and there is said to be no possibility of leakage. No care is required to keep the valve tight. A slight movement of the stem will cause a corresponding larger movement of the diaphragm and opening of the valve.

It is made in regular one inch and one and one-quarter inch and one and one-half inch sizes. The rough body is plated. Patents are pending.

RESULTS SUCCESSFUL.

Turn over the pages of any magazine devoted to Helpful Hints for Honest Hustlers and you will come across an article expatiating on the value of thoroughness. The ordinary subscriber reads the article, agrees with the essential arguments, pats himself on the back and then forgets the point brought out. For instance, the ordinary heating engineer will read an article on thoroughness and will compare the arguments advanced with his own personality. He will argue with himself, "I am thorough. My work is thorough. Every furnace that I install is perfect or as near perfect as is possible for mortal man, as to every bolt, every pipe, every elbow and every register. I am capable and conscientious. There is no question but what I am thorough in my work."

Arguments favoring thoroughness are ineffective because they defeat their own purpose. The thorough man will not go deep enough. He is so shallow that he will not discover that he is shallow. If the heating expert mentioned above had taken the trouble to delve a little deeper, he would have discovered that while practically his own work had been accomplished in a thorough manner, his theoretical obligations had not been entirely fulfilled. Assuming that a furnace has been installed in a workmanlike manner and that it will give thorough satisfaction if operated properly, there is no guarantee that the last factor will be realized according to the established rules. A furnace man's work proper has been successfully accomplished. He leaves the rest for the householder. As a rule however there is no rosy indication that the householder knows much more about it than the cat that basks on the cinders or the child that soon finds out that a furnace is hot.

The American Radiator Company of Chicago have recently brought out a booklet entitled "Results Successful." It is a book of common sense rules for running Ideal boilers, issued in the interest of those who pay the fuel bills and to help those who take care of the boiler. The time has arrived when property owners are firing their boilers and many of them are new this year. There is much inexperience amongst the retail trade. Accordingly the American Radiator Company extend their educational work to include helpful ideas in regard to the care of the outfit after it is installed. Retailers will take notice that the advertising interest of this company does not cease with the sale of the apparatus, but continues in assisting to make the output of this company produce the best results it is capable of. The company realizes that it is only by creating satisfaction on the part of the consumer that the sales of the company can be greatly increased.

The contents of the booklet include a bit of general advice, the economy of a good draft, general firing rules, night firing, first day firing, every day firing, economy and fuel, for burning soft coal, for burning coke, the right chimney flue, and other rules applying specifically to water boilers, and later to steam boilers.

PARAGRAPHS.

The Richardson & Boynton Company, makers of Perfect and other furnaces, have decided to remove from their present quarters at 84 Lake street, which they have occupied for almost a quarter of a century, and locate their Chicago office at 20 Lake street.

Albert E. Hadlock and Adelvieh Benziger of New Brighton, Staten Island, and C. J. D. Noble of Arrochar are the incorporators of the Auto Draft Manufacturing Company, New York City, capitalized at $20,000 to manufacture draft regulators and damper adjusters.

Of the many firms who have been benefited by the greatly improved trade conditions throughout the whole country, the Wise Furnace Company of Akron, Ohio, must be reckoned as foremost amongst the number. While this company have obtained substantial benefit from the general prosperity, their remarkable growth is not to be attributed solely to this source. The Wise furnace was placed upon the market early in 1904. It met with an immediate demand. Perhaps no other hot air furnace has ever been born under such auspicious circumstances. The record of the first year's sales is truly remarkable. The sales during the second year, the year about to close, are satisfactorily in excess of those during 1904. In fact they are so far in excess that additions to the facilities have been found necessary and they are now taking possession of a foundry one hundred by one hundred and twenty feet. At this rate of progress it may easily be estimated that the capacity of the plant after the new foundry has been underway, will be sufficient for perhaps five months and fourteen days. Orders for Wise furnaces have been coming in almost faster than the officials can wish for.

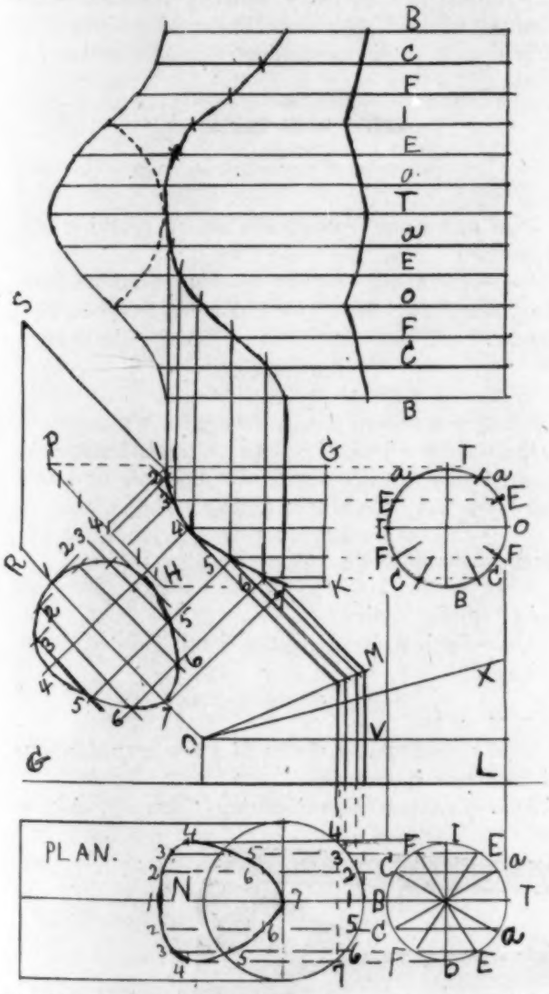
Tinshop

INTERSECTIONS OF CYLINDERS.

Replying to the question of F. L. Kaiser, we submit the following:

The illustration shows a cylinder R-S-O-M inclined to the horizontal plane, at an angle of 45 degrees, intersected by a vertical cylinder O-M-V, whose base is a circle, as shown by figures 1-2-3-4-5-6-7 and N in plan.

The inclined cylinder is also intersected by a smaller cylinder shown in elevation by P1-G-H-K. The illustration also shows the intersection between the vertical cylinder with a circular base and the small



cylinder, the axes of cylinders being placed at right angles.

The small cylinder P1-G-H-K is intersected by the cutting plane P-H. The pattern is a two-piece elbow square in plan. The small cylinder is also intersected by the cutting planes 4H and 4I. The pattern is a tee joint, square in plan.

SOLUTION ON DRAWING BOARD.

G-L is the ground line. Construct the elevation of the inclined cylinder R-S-O-M and the vertical cylinder O-M-V; also construct the elevation of small cylinder P1-G-H-K. In the elevation draw the circle TA-EO-FCB, and through those points of division draw horizontal lines parallel to the line P-I-G, so as to intersect the cutting plane P-H.

Draw the plan of the bases of the cylinders and divide the base of small cylinder into the same number of points as the small circle in elevation. You will notice the changed position of the letters. In the elevation T is at the top line, while in the plan, line T passes through centers of both bases. We will explain how this comes. Consider the line I-O in plan and line T-B in elevation as being hinged to the paper; revolve each circle to the left, then the semi-circle in plan. 1-E-a-Ta-EO will be above the paper, the other half of the circle will be below the paper. In the elevation the semi-circle to the right of hinge T-B will be above the paper, the other half will be below the paper. Now consider line G-L as a hinge; revolve the elevation towards you until the elevation of the drawing is vertical. By placing center of elevation directly over center of plan the lettering is the same in each circle. Through the points of division in small circle in plan draw lines parallel to the axes of cylinders, intersecting the base of large cylinder in 1-2-3-4-5-6-7. Through those points draw vertical lines, intersecting cutting plane O-M, and continue the lines, parallel to line S-M in inclined cylinder.

Mark the points 1-2-3-4-5-6-7 where the inclined lines meet the horizontal lines previously drawn through points in horizontal cylinder. Lines traced through the points will give the shape of the intersection.

PATTERNS.

Draw a vertical line and space the distances between the points of division on small circle in elevation, as BCFO-EA-TA-EI-FCB. Draw pattern lines through those points as shown.

Through the points of intersection 1-2-3-4-5-6-7 draw vertical lines, intersecting pattern lines as follows: Line 1 intersects line T in pattern; line 2 intersects line a-a, line 3 intersects line EE, line 4 intersects line O-1, line 5 intersects line FF, line 6 intersects line CC, line 7 intersects line BB. Lines traced through the points give the pattern of the intersection.

Draw vertical lines through points 1-2-3-4-5-6-7 at base of large cylinder in plan to meet the pattern lines; will give pattern for intersection of small cylinder and large cylinder as shown. To avoid confusion we only drew the lines to intersect OM.

To obtain the shape cut from the large cylinder by looking at plan of base of large cylinder, the lines extend from 1 to 2-3-4 and to 5-6-7. Draw a line perpendicular to line RO and space the distances 1-2-3-4 on each side; draw lines through the points 1-2-3-4 parallel to line RO; now draw lines through the points of intersection 1-2-3-4-5-6-7, perpendicular to the pitch of cylinder, to intersect the lines previously drawn in points 1-2-3-4-5-6-7 on each side of line RO. This shape can be cut out of large cylinder. To obtain the square elbow pattern, draw vertical lines through the points on line PH to intersect pattern lines. A projected view of the intersection is shown in plan at N. The pattern for the tee joint is found by taking square elbow pattern and turning over the cen-

ter portion between O and 1, the oval shape between elbow pattern and tee joint is the shape to be cut out of the cylinder that the tee joint intersects.

REMARKS.

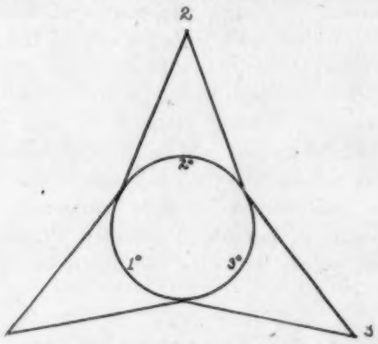
The line O-M is an intersecting line for an octagon mitre; the line O-X is an intersecting line for another angle. At O you can place any angle, and by drawing vertical lines from the base of large cylinder you can obtain a pattern of the intersection by laying out the pattern lines to the right of the drawing.

The solution of this illustration applies to all intersections between cylinders, as the position of a cylinder cuts no figure in an intersection.

STAR BOSS PATTERN.

To THE AMERICAN ARTISAN:

Will you please demonstrate, for benefit of the craft, how to cut a star Boss pattern for any size cylinder vessel? I have occasion to use same in my work occa-



sionally, and do not find anything in the "Large Pattern Book." I believe all "tinks" will be interested in following same from column "Tin Shop" of the journal. I. M. BIGELOW.

LIGHTNING PORTABLE HAND PUNCH.

A small device especially designed for punching holes in close corners and intricate places is the tool of all tools desirable for tinners' use. The American Lock Nut Company of Oregon, Illinois, are calling attention to the Lightning portable punch, shown in the accompanying illustration.

This is a high grade tool made of steel by a pat-

Lightning Portable Hand Punch.

ented process. It is designed for punching holes in angles, flanges, tank heads, the inside of circles of any degree of curvature, ferrules two inches in diameter and larger, metal window sash, cornices, blow pipe and stack work, gumming saws, punching magazines, and the thousand other places where it is necessary to make holes cheaply and quickly.

It will punch to the center of a one inch flange or angle, or when so ordered to the center of a five-eighths inch or a three-fourths inch angle. It punches and strips with either the upward or downward movement of the lever. In this way it is doubly valuable as it frequently happens that on certain work one movement can be used where the opposite movement would be impossible.

When desired, the punch is also fitted with dies for setting rivets. On work where a template is used, the operation is quick and satisfactory. When used in the vise it makes a satisfactory stationary punch. Gauges can be fitted for doing accurate work. The punches and dies are said to be in perfect alignment at all times and the different size punches and dies can be changed quickly. The vise is operated by a cam and lever so that the punch can be immediately fastened and released.

This punch is used in all sections of the country and with satisfaction in every instance recorded. The manufacturers will be pleased to furnish additional information to those mentioning THE AMERICAN ARTISAN.

NOTES AND QUERIES.

TWENTIETH CENTURY WASHER.

From "Curious."

Who makes the Twentieth Century Washing Machine?

Ans.—Twentieth Century Washing Machine Company, Mansfield, Ohio; John Collander, St. Paul, Minnesota; Paul Gerlach, Mount Clemens, Michigan.

PRICE BOOK.

From Rutledge & Schulte, Belgrade, Montana.

Kindly recommend a hardware price book.

Ans.—Ladd's Discount Book, Wm. J. Ladd, price $3.00; Lamberson's Price Book. For sale by Daniel Stern, 69 Dearborn street, Chicago.

DREIS & KRUMP.

From Schultz & Moore, Chicago.

What is the Halsted Street, Chicago, firm that makes cornice brakes?

Ans.—Dreis & Krump, 3214 South Halsted Street, Chicago.

HARDWARE SPECIALTIES.

From N. A. F.

Kindly send me the names of a few manufacturers of hardware specialties.

Ans.—Lenawee Manufacturing Company, Adrian, Michigan; Hill Dryer Company, Worcester, Massachusetts; Mannen & Esterly Company, Cleveland, Ohio; Gillette Sales Company, New York City; Edward S. Hotchkiss, Bridgeport, Connecticut; Pullman Manufacturing Company, Rochester, New York; Heller Company, Montclair, New Jersey; H. O. Keferstein, Barberton, Ohio,; Taplin Manufacturing Company, New Britain, Connecticut; F. D. Kees, Beatrice, Nebraska; Taylor & Boggis Foundry Company, Cleveland, Ohio; F. C. L. Daus Duplicator

Company, New York City; Stuber & Kuck, Peoria, Illinois; Atlas Manufacturing Company, New Haven, Connecticut; Enterprise Manufacturing Company, Akron, Ohio.

GAS BURNERS.

From B. F. Company.

Where can we buy burners for gas stoves?

Ans.—G. M. Clark & Co., Chicago; Dangler Stove Co., Cleveland, Ohio; Economy Stove Manufacturing Company, 356 Scranton Avenue, Cleveland, Ohio; Favorite Stove & Range Company, Piqua, Ohio; Fanner Manufacturing Company, Cleveland, Ohio; Gem City Stove Company, Dayton, Ohio; Independent Manufacturing Company, Cleveland, Ohio; A. J. Lindemann & Hoverson Company, Milwaukee; Jewett & Company, Buffalo, New York; M. & D. Range Company, Chicago; New Method Stove Company, Mansfield, Ohio; Pittsburgh Stove & Range Company, Pittsburgh; Schneider & Trenkamp Company, Cleveland, Ohio; Taylor & Boggis Foundry Company, Cleveland, Ohio; Standard Lighting Company, Cleveland, Ohio.

FAUCETS.

From Battle Creek Sanitarium, Battle Creek, Michigan.

What firms make a specialty of faucets?

Ans.—J. M. Litchfield, 227 Water Street, New York City; Clark Novelty Company, Rochester, New York; Union Brass Works, Boston; Taylor & Boggis Foundry Company, Cleveland, Ohio; McKenna Brothers Brass Company, Pittsburgh; Walworth Manufacturing Company, Boston; North Brothers Manufacturing Company, Philadelphia; Union Manufacturing Company, New Britain, Connecticut.

RELIABLE GASOLENE STOVE.

From Stove Co., Chelsea.

Who makes the Reliable gasolene stove?

Ans.—Schneider & Trenkamp Company, Cleveland, Ohio.

ITEMS.

The Arkansas Slate & Supply Company has been incorporated with a capital stock of $300,000 for the development of slate products. The headquarters will be at Little Rock, Arkansas.

The pattern warehouse of the Illinois Steel Company at Chicago was almost destroyed by fire on December 4th. The losses will amount to $1,000,000, almost wholly covered by insurance.

The Louisville Cornice & Roofing Company have moved into a new plant at 222-228 Tenth Street, Louisville, Kentucky. The present plant is over one hundred thousand feet square, and is equipped with labor saving machinery.

The Standard Stamping Company of Albion, New York, has been organized with a capital stock of $75,000. The directors for the first year are A. C. Burrows, E. W. Wilcox, Andrew F. West, C. H. Thomas and William Dicks.

The Thompson Enamel & Chemical Company of Gloucester, Maine, has been incorporated with a capital stock of $10,000. James Thompson is president, Thomas P. Bolger is treasurer, and M. F. Buckley is clerk. The company will make enamels of various colors.

J. F. Sturn and others, 17 Morton Street, Newark, New Jersey, are the incorporators of J. F. Sturn Company, 900 Broad Street, Newark, capitalized at $50,000 to conduct a plumbing, tinning, gas fitting and general construction business.

The New York State Steel Company has decided to build a plant on the Buffalo River. The offices of the company are at Buffalo. This move may be taken as further evidence of the increasing tendency to select sites along the Great Lakes as the best possible locations for iron and steel plants.

The December calendar of the Globe Machine & Stamping Company, 971 Hamilton street, Cleveland, announces that Globe Improved Tilting tumblers may be run in almost any position. They are said to effect a great saving of time and money. The company manufactures dies and stampings to order.

The Central Stamping Company of Newark, New Jersey, are increasing their plant in order to meet an increased demand for their products. The company manufactures kitchen utensils and household goods. In addition to the large enameling department which occupies a building two hundred feet long by one hundred feet wide, a new building one hundred and fifty by one hundred and twelve feet is being erected. It will consist of two stories made of cement. The new building will double the capacity of the plant. Shipments are made directly to and from the factory by means of railroad sidings.

W. S. Ravenscroft, the recently elected president of the United Sheet & Tin Plate Company has purchased the interests of L. C. Taylor and D. A. Gardner in the company. Mr. Taylor has been succeeded as secretary by M. S. Kline, cashier of the Elk County National Bank, Ridgeway, Pennsylvania, who is also treasurer. Mr. Gardner has been succeeded as general manager by George J. Humbert, formerly president of the Humbert Tin Plate Company, Connellsville, Pennsylvania. The works of the company are situated at Newark, Newcomerstown and Marietta, Ohio, and Connellsville, Pennsylvania.

Charles W. Bennett of the American Sheet & Tin Plate Company, announces that six more mills of the Elwood, Indiana, branch will soon be in operation. This will bring the number up to twenty-eight and the number of workmen to two thousand. Reports from Sharon, Pennsylvania, state that a new tin mill to cost $250,000 will be erected within a short time. Options have been taken on land, though full particulars are lacking. It is probable that the new mil! will be an extension to the plant of the American Sheet & Tin Plate Company, now located in that city. The Shenango, Pennsylvania, tin mill of the same company resumed operations recently. The entire plant which is perhaps the largest of its kind in the world, closed for repairs on July 1st. On September 1st, twenty of the thirty mills were placed in operation. The remaining ten mills were opened on November 27th. The Humbert Works at South Connellsville resumed operations on December 3d.

Trade Report.

IRON AND STEEL MARKET.

Chicago, December, 8.—Conditions in the local pig iron market are reflected throughout the country as a whole. The amount of buying has decreased but prices are firm and there is almost unanimous feeling that the beginning of the new year will witness a continuance of the heavy demand of the last three months. Inquiries for immediate shipment of pig iron were not numerous during the week under review and the sale of twelve thousand five hundred tons of malleable Bessemer was the largest actual transaction recorded. The melting of pig iron is proceeding at a phenomenal rate, however, and the proceeds are going rapidly to the consuming public. Any suspension of shipments from furnaces would result disastrously. There is some complaint regarding the regularity and alacrity of shipments from Southern sources, but it is not of wide range and will probably be rectified promptly. The delay was caused, as announced by one interest, by car shortage. Northern foundry iron No. 2 is quoted at $19.00 furnace or from $19.50 to $20.00 delivered. Southern iron is held by Southern furnaces at $15.00 Birmingham, but concessions are being given. It is evident that the upward movement in prices has been checked.

There is a let up in the orders for steel plates, but now orders have accumulated so heavily during the last few months that a decrease in the demand is welcomed by the mills. It is reported that many of the independent interests are not satisfied with the present schedule and especially with the action of the Steel Corporation in not acceding to the demand for an advance. It is reported from Germany that the German Steel Trust has decided to advance prices, and that its output is sold for the whole of the first quarter of 1906. This move, if made, will tend to strengthen America's position in foreign markets.

The iron and steel bar markets are very strong. The leading interest is now securing 2c for iron bars. Some of the independent mills are, however, taking orders at from $2.00 to $3.00 a ton below this price. A contract for eight thousand tons of steel bars was received during the week. Jobbers' prices have been advanced.

PIG IRON.

Rogers, Brown & Company will say in their weekly report:

Fortunately for all concerned, the pig iron trade has settled down into an easy stride of good volume. The market has not seen any specially large lots of tonnage placed, but it is a steady transacting of good business which marks the most satisfactory condition. With practically all the output of furnaces sold for the first few months of 1906, there is little effort being made to increase sales for first half delivery. What tonnage remains available will be more than cared for as spot shipment when the proper time comes. Prices continue strong and the outlook is extremely favorable for their remaining so. The majority of producers are still out of the market and the ready sale which is to be had for small lots of slightly off material offered from time to time shows that there is an eager market for any class of iron which can be utilized.

Although the remarkable pace of production in this country has been commented upon from time to time in these reports, it is doubtful whether the majority of readers have an adequate idea of the tremendous volume of business which has been accomplished during the present year. Statistics recently compiled show this most forcibly. Among the leading resources of the country the largest per cent of increase over the previous year was reached in the lake shipments of iron ore, this being 51 per cent in advance of 1904. The next largest was that of 39 per cent in the production of pig iron. This was figured on basis of 23,000,000 for 1905, as against 16,497,000 for 1904. That this remarkable production could have been made and practically all absorbed with the year's exit, showing prices at the present level, is one to excite comment. These two records are way ahead of any of the other of our resources, the nearest to them being the increase in bank clearings of about 33 per cent.

There is no let up in the urgency of buyers' demands for quick shipment of iron on contracts. The large consumers, as well as the general foundry trade, all seem to be melting more iron than had been figured on and are pushing accordingly. Charcoal iron, the higher grades of Southern foundry iron and specialties are scarce.

The car situation is still serious and now it becomes only a question as to how long it will be before adverse weather conditions make it worse than at any time heretofore.

Coke continues in excellent demand and the prices are strong. There are still a number of contracts for first half and year's requirements for 1906 pending, and the volume of business continues good.

Matthew Addy & Company will say in their weekly report:

As yet the approaching winter has had no effect on the iron trade. So far the weather has been perfect and has been rather helpful than otherwise, except for too much rain in the south for open air ore operations. The volume of trade is tremendous. Furnaces are shipping to the limit of their capacity and consumers are using iron as rapidly as it is received. The latter, while they have bought heavily, are not accumulating iron. Of course some far sighted foundrymen have been able to pile enough iron to feel easy, no matter what happens in the future, but they are decidedly the exception rather than the rule.

The troublesome times as regards the shipping of coke have been postponed; that is, the railroads have been able to furnish more cars than were anticipated, and shipments have been heavier than at this time last year. But in the Wise county, Virginia, and West Virginia districts there is a car shortage that is almost paralyzing to regular coke operations. And the worst of it is that the first genuine winter storm will make matters much worse.

Actual buying during the week has been small. Users of pig iron have been buying for five months and they are now taking a rest. Prices are firm.

Coke buying has, however, been of large dimensions. The furnaces have been heavy purchasers and practically all their contracts are for shipment over the first half of next year.

SHEETS.

John McVoy & Company, Chicago, report as follows:

The market on black and galvanized sheets is very steady, and nearly all of the independent mills are unable to make deliveries that they have contracted to make. Sheet copper advanced 2c lb. as predicted last week. Copper is very scarce at any price. It is rumored that there may be an advance on pipe and gutter, to take place in the near future.

We quote prices as follows:

Black sheet steel, No. 16 gauge, $2.45; No. 18-20 gauge, $2,50; No. 22-24 gauge, $2.55; No. 26 gauge, $2.60; No. 27 gauge, $2.65; No. 28 gauge, $2.75; No. 29 gauge, $2.95.

Wood's smooth, No. 20 gauge, $2.90; No. 22-23 gauge, $2.96; No. 26 gauge, $3; No. 27 gauge, $3.05; No. 28 gauge, $3.15.

Wellsville polished sheet steel, 24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14 and 15 gauge, $2.80; 18-20 gauge, $3.05; 22-24 gauge, $3.10; 26 gauge, $3.30; 27 gauge, $3.50; 28 gauge, $3.70; 29 gauge, $4; 30 gauge, $4.50; 36-inch wide on No. 20 and lighter, 20c per 100-lb. advance; on 48-inch wide material, 16 gauge, $3.60; 18 gauge, $3.90; No. 20 gauge, $4.55.

Corrugated, 2½-inch, painted, No. 28 gauge, $2.15 a square; galvanized, $3.25 per square. Sheet copper, 21c base. Solder, warranted, 50-50, at 20c lb.

CHICAGO HARDWARE MARKET.

Orders for holiday hardware have so far exceeded previous years that the 1905 increase far exceeds that of any other market. Dry goods, furniture, shoe, leather and kindred lines are all selling satisfactorily but the increase in hardware is grossly disproportionate. This remarkable increase is accountable for two reasons. In the first place consumers as a whole, are more prosperous than perhaps ever before. Secondly, catalogue house and department store competition have aroused retailers from a spirit of lethargy and they have adapted themselves to circumstances. Holiday articles are no longer regarded purely in the line of specialties. They are carried by perhaps seventy-five per cent of the retailers throughout the country. Hardware retailers look upon the holiday trade as much a regular part of their yearly program as the purchase of a heavy supply of lawn mowers, wire fencing, ice cream freezers, cream separators, etc., in the early Spring. Specialties have become more in the nature of staple articles. Retailers are adapting themselves to popular fancies and are endeavoring to please the great consuming public in whatever direction their predilection may lead.

While the greatest activity prevails in the hardware market, it is not confined entirely to holiday goods. There is more than a moderate demand for the staple lines and less than the usual falling off in the demand for general hardware. The fact that no serious snow falls have occurred to deter outdoor work and delay shipments, has aided in delaying the usual depression that occurs at this time of the year. Building operations throughout the country have gone on at the rate set during the last six months and there is an active demand for builders' hardware. City contractors have not alone aided to increase the demand for these goods. Rural districts have witnessed more building than for the last ten years.

At a meeting of the leading screw manufacturers held recently, prices on these products were reaffirmed. It is likely, however, that higher quotations will soon be announced. Manufacturers of enameled ware are inclined to shade prices as a result of overproduction. Competition from European markets has been keener during the past year than for some time. The undertone of the enameled ware market continues firm, however, and the holiday demand for these supplies has been greatly in excess of estimates.

TIN PLATES.

Business in tin plates continues very active. The leading producer is asking $3.40 in one hundred-pound boxes, f. o. b. mill. In London tin plates continue steady on the basis of 12s 9d, f. o. b. Swansea. Local jobbers are quoting as follows, f. o. b. cars, Chicago:

20x28 80-lb. Cokes	$ 7.55
20x28 90-lb. Cokes	7.75
20x28 100-lb. Cokes	8.00
20x28 107-lb. Cokes	8.50
20x28 1X Cokes	10.50
20x28 2X Cokes	12.00
American "A" Charcoal IC	9.25
American "A" Charcoal 1X	12.00
Additional Xs each, $2.	
Melyn Grade Charcoal, IC	12.00
Melyn Grade Charcoal, 1X	14.00
Additional Xs, Charcoal, $2.	
IC 20x28 100-lb. Ternes (Seconds)	6.85
IC 20x28 200-lb. Primes	7.75
IC 20x28 214-lb.	8.00
1X 20x28	10.75

COPPER.

Prices on all grades of lake and electrolytic copper were raised on December 7th in the New York metal market. One of the big copper consumers paid 19½ cents per pound for a five thousand pound lot. Lake copper for immediate delivery and spot supplies of electrolytic are quoted at from 18½c to 18¾c. Additional orders for shipments in January, February and March have been placed by both home and European consumers on the basis of 18c.

The New York Metal Exchange has advanced its official prices ⅛c on the bid figures for both electrolytic and lake grades. Both bid and asked figures for the casting grades have been raised a similar amount. The new quotations on electrolytic and lake are from 17⅞c to 18c and casting grades from 17⅝c to 17⅞c.

One week ago the copper market broke all records by reaching the high mark of 18c. Prices are now stronger, and there is a current impression that the top has not yet been reached. The London market is advancing in sympathy and the best selected brands are quoted at £84 5s subject to the usual trade discount.

Chicago jobbers have not advanced prices on brass products but the market is extremely firm. Copper is scarce and supplies are being guarded. Sheet brass is now quoted with a discount of 17½ per cent. Brass rod is quoted at 22½ per cent, brazed tubing at 25 and 2 per cent and sheet copper at 22 cents net base. The discount on wire brass is 15 per cent.

OTHER METALS.

Pig tin has advanced again and the New York Metal Exchange fixed its settling price at 35.05c for December, and 34.95c for January. This is an advance of almost 1c over last week's quotations. The London market is strong and its strength is being reflected in this country.

Prices have been raised by the American Smelting & Refining Company and Chicago rates for desilverized lead are now 5.30c and for corroding, 5.40c. St. Louis prices are 5.27½ and 5.37½ respectively. This is an advance of .10c. These prices are quoted on nearby shipments from the mines in lots of fifty tons and over. Little of the desilverized product is available for spot shipment and the common brands of soft Missouri lead are firm.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 60
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$20 00@$20 50
North'n Coke Fdy., No. 1	20 00@ 21 50
North'n Coke Fdy., No. 2	19 50@ 20 00
North'n Coke Fdy., No. 3	19 00@ 19 50
Northern Scotch, No. 1	20 00@ 21 50
Ohio Strong Softeners, No. 1	20 30@ 20 80
Ohio Strong Softeners, No. 2	19 80@ 20 30
Southern Silvery, 4 to 6 per cent Silicon	19 15@ 19 40
Southern Coke, No. 1	18 65@ 19 15
Southern Coke, No. 2	18 15@ 18 65
Southern Coke, No. 3	17 65@ 18 15
Southern Coke, No. 4	17 40@ 17 90
Southern Coke, No. 1, Soft	18 65@ 19 15
Southern Coke, No. 2, Soft	18 15@ 18 65
Southern Gray Forge	16 65@ 17 15
Southern Mottled and White	16 40@ 16 65
Malleable Bessemer	20 00
Jackson Co. & Ky. Silvery 8% Silicon	21 30
Jackson Co. & Ky. Silvery 10% Silicon	22 30
Alabama Basic	18 65@ 18 90

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$2 55
No. 18-20 per 100 lbs.	2 60
No. 22-24 per 100 lbs.	2 65
No. 25-26 per 100 lbs.	2 70
No. 27 per 100 lbs.	2 75
No. 28 per 100 lbs.	2 85
No. 29 per 100 lbs.	3 05

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4 60
No. 26 per 100 lbs.	4 70
No. 27 per 100 lbs.	4 80
No. 28 per 100 lbs.	4 90

SMOOTH STEEL.

Wood's Smooth, No. 20	$2 90
" " No. 22-24	2 95
" " No. 25-26	3 00
" " No. 27	3 05
" " No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel.	
" " "A" $10 20, "B"	$9 20
Dickey Planished Sheet Steel	8½c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 30, per 100 lbs	5 00
Nos. 22 & 24 x 36 in., per 100 lbs	3 70
No. 26 x 36 in., per 100 lbs	3 90
No. 27 x 36 in., per 100 lbs	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½ per lb.	20½c
Commercial ½ & ½ per lb.	19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks case, per cwt.	$7 90
250 lb. Casks per cwt.	7 95
Sheets cr cwt.	7 70

COPPER.

Copper base,	21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c

Sheet.

Full coils per 100 lbs.	$7 00
Cut coils per 100 lbs.	7 25

HARDWARE.

ADZES.

Carpenters'.	
Ajax	35&15%
Blood's	40&2½%
Coopers'.	
Barton's	20%
White's	15%
Ship.	
Ajax	33⅓%
Blood's	37½%
White's	12½%

AMMUNITION.

Caps. Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Eley's	52c
Cartridges.	
Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol and Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs. 22 cal.	$1 24
Peters Blank Ctgs. 32 cal. C. F.	4 60
Peters BB Caps, Round ball	1 50
Peters BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
Primers.	
Berdan Primers	$1 00
Peters Primers	20%
Winchester Primers	20%
Shells.	
Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Ideal Empty	25&7%
Peters Target and High Gun Smokeless	40&6%
Peters Premier and Ideal Smokeless	40, 10, & 10%
Peters Loaded Shells, League	40%
Peters Referee Semi-Smokeless	40&2½%
Winchester Blue Rivals	33⅓ &
Winchester Yellow Rivals	11%
Winchester Repeater	40&5%
Winchester Leader	40-10&10%
Winchester Loaded Shells, Black Powder	33⅓ & 11%
Gun Wads—per 1,000.	
Peters Gun Wads	18%

Powder.

		Each
King's Smokeless, kegs		$11 30
" " ½ kegs		5 80
" " ¼ kegs		2 97
" " 1-lb. cans		51
" " 1-lb. " rifle		70
Dupont's " 50-lb. drum		22 45
" " 25-lb. kegs		11 35
" " 12½-lb. kegs		5 80
" " 6¼-lb. kegs		2 97
" " 1-lb. cans		51

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 90
Buck Shot, 25-lb. bags, per bag	1 90
Chilled Shot, 25-lb. bags, "	1 90

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper	33⅓%

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nut	60&10&5%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	33 50
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40&5%
Iwan's Vaughan pattern, 4 to 9-in., per doz	6 00
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.	
Handled per doz.	$0 28
Shouldered, assorted, 1 to 4, per gro.	95
Patent asst'd, 1 to 4 "	90
Harness.	
Common "	1 10
Patent "	90
Peg.	
Shouldered "	95
Patent "	40
Scratch.	
No. 2, handled "	4 80
No. 1, socket handled per doz.	1 15
No. 20 Hurwood "	2 00
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Camp Fire, 3 lb per doz.	$6 25
" " 4 lb., freighters', per doz.	7 85
Cast Steel, good grade, "	6 25
Pioneer "	6 75
Broad.	
Peerless 40-10&5%	
Red Warrior per doz.	$22 50
Firemen's (handled) "	13 00
Single Bitted (handled).	
Gladstone, 3 to 4 lbs., per doz.	$10 75
Hunt's " " "	9 00
Lippincott's " " "	9 00
Mann's " " "	9 00
Pioneer " " "	9 75
Valley Forge " " "	9 00
Maricopa " " "	7 50
Single Bitted (without handles).	
Gladstone, per doz. 3 to 4 lbs.	$8 50
Hunt's " "	7 00
Lippincott's " "	6 75
Mann's " "	9 50
Pioneer " "	9 50
Valley Forge " "	6 75
Maricopa " "	6 50
Double Bitted (without handles).	
Lippincott's, 3 to 4 lbs. per doz.	$9 25
Mann's " "	9 50
Pioneer "	9 25
Valley Forge " "	9 25

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	30%

BARS, CROW.

Pinch or Wedge Point cwt.	$2 95

BASKETS.

Clothes.	
Small Willow per doz.	$5 75
Medium " "	6 50
Large " "	7 25
Galvanized Iron. ½ bu. 1 bu. 1½ bu.	
Per doz. $4 00 5 50 7 00	

BEATERS.

Carpet.	
Rattan per doz.	$2 40
Raymond's Steel Wire "	80
Woven Wire, No. 4 "	1 10
Egg.	Per doz.
o. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths'	70%
Hand.	
8 inch per doz.	$6 85
10 inch "	8 40
Molders'.	
13 inch "	13 00

BELLS.

Call.	
2½ in. nickeled bell per doz.	$1 85
2½ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell per doz.	17 00
4½ in. nickeled brass bell and base per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic per doz.	$0 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	70, 10&5%
Farm, lbs. 40 50 75	100
Each $1.10 1.30 1.85	2.65

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	50&5%
New Jenning's	50, 10&10%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" " Large " $26.00	30%
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger pattern Car	40&5%
Center	40&10%
Countersink.	
Wheeler's per doz.	$1 20
American Snail head. "	70
" Rose " "	80
" Flat "	70
Buck Bros.' Flat "	2 65
German "	70
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	50&5@50&10%
German Pattern per doz.	$0 45
Gouge "	80
Spoon "	80
Countersink "	1 20
Reamer.	
Buck Bros.' ½ Round "	2 75
" " Square "	2 50
Standard ½ Round "	75
" Square "	75
German Octagon "	75
Screw Driver.	
Round Shank "	[illegible]

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ¾ & 1¼ in.....60&5%
Clock Spring.....60&5%
Star 15%

Hack.
Disston's .....25&5%
Griffin's.....25&5%
Star 15%

Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16 26 & 045.. 4 2
No. 11 ..... 6 4
W. M. & Co 's No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel ....40&10%

Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Slove.....40%

Wash.
Globe .....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
8¼ oz. iron.....per doz. $0 65
1¼ lb. " ..... " 1 60
2¾ lb. " ..... " 1 80
13 oz. lead ..... " 3 00
6¼ oz. brass..... " 3 30

BOLTS.

Carriage, Machine, Etc.
Carriage ¾x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ¾x6 .....70&5%
Machine, ¾x4 and sizes smaller and shorter,.....75&5%
Machine, sizes larger and longer than ¾x12.....70&5%
Machine, longer and larger than ¾x12.....70%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....8 &10%
Tire .....75&10%
Wagon Box Strap .....70&10%

Mortise Door.
Gem.....50&10%
Ives'.....50&10%

Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%

Flush.
Wrought, B K .....40&5%

Spring.
Wrought .....75&10%
" Brass .....75&10%

Square.
Cast.....40%
Wrought .....60-10&10%

Tire.....72&¼%

BORERS.

Angular.
Miller's Falls.....per doz. $13 75

Bung.
Common ring with handle.
Inches..... 1¼ 1¾ 2
Per doz..... $6.25 7.25 8.50

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2¼%

BOXES.

Mail, No.... ..... 5 10 2
Per doz..... $3.50 10.50 13.00

Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 20

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's.....60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces.....25%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50

Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2½%
Wire .....80, 10&5%

BROILERS.

Wire..... .....70&10%
Crown, Self-Basting, No. 80. doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40

Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 833 and 833.....85-10&7½%
Wrought Steel, Japanned.
Nos. 731 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing..... .....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40

Milk.
Elgin Pattern.
Nos..... 808 810
Gals..... 8 10
Per doz..... $18.00 $23.80

New Elgin Pattern.
Eureka Pump, 5 gal.....$7 85
Wood Jacket.....70, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $13.75 $15.00 $14.75

Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $18.00 $19.20

New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $22.15 $23.00

Oil and Gasoline.
1 Gal. glass, Daisy....per doz.$1 80
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.45 $2.40 $3.35
Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33⅓%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list. .....60&5%
Philadelphia Plate, new list..65&10%
Martin's.....50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel.25&5%
" Rubber Weel.....15%

CATCHERS, GRASS.

Bieder's No. 1.. .....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack .....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
5/16 in. $7.25; ½ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 9/16 ⅝ ¾ ⅞
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ⅞ 1 1¼
Per 100 lbs.. $4.00 $4.00 $4.10

Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓%
German.....60-10&5%

Niagara, new list.....40&5
Triumph, " 30%

Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5 25

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch ..... ½ 9/16 5/8
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
5/16 in. $8.50; ½ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's .....70&10%

Trace Chains.
Western Standard.
6½— 6-2..... ...per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1 ..... " 48c
7 —10-6..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brzd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality.....per lb 10@19c

Socket, Framing and Firmer.
Barton's.....20%
For beveled back, add per doz..60c

Tanged, Firmer.
With handles, add per doz.....60c

Choppers, Enterprise Meat.
No. 12.....$2 10
No. 22..... 3 40

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel. 70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $20.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAWS, TACK.

Cast, wood hdle.....per doz. 42@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.00
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire..... per doz. $0.50

Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable ....per lb 3½c

CLIPPERS.

Bolt .....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 20c

CLOTH.

Emery.
Ajax..... 50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 3 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.... .....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $0.18
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz... $0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.
Inches..... 5 6 7
Plain Tin....per gro. $1.60 $2.00 $3.00
Japanned Tin " 2.00 3.00 4.25
Lacquered Brass " 2.40 2.60 3.60

COMBS, CURRY.
Nos .. 000 20 321 330 417 416
Per doz.$0.32 .80 .90 .95 .80 1.00
Nos 531 532 530 535 545 590
Per doz.$0.96 1.20 1.10 1.85 1.40 1.30

COMPASSES.

Carpenters'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb .....per lb 28c
1½ lb.....28c 2 lb..... " 25c
3 lb and larger..... " 23c

CORD.

Picture.
White Wire .....80-10&5%

Sash.
Baltic Braided Flax.....per lb 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 20c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $3 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil.....45¢
Smith & Hemenway Co.....50¢
Woodward.....40¢
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42.....25¢
No. 100, list, $18.00.....40&10¢
Nos. 2 and 4.....25¢
Universal... Nos. 1 2 3
Per doz.....$10.50 $12.50 $17.00
Smith & Hemenway Co.....25¢
Pipe.
Stanwoods...No. 1 2 3
Each..... $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife " ..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Standard.....50&10¢
American.....45&10¢

DIES, STOCKS AND

Discount.....40&5¢

DIGGERS.

Post Hole.
Acme.....per doz. $8 75
Atlas..... " 8 25
Eagle..... " 5 75
Eureka..... " 6 25
Hercules..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1⅛ in. " " " 7 50
1⅛ in. 3-panel natural pine, fancy.....per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60¢&65&5¢
Blacksmith's Twist.....60¢
Breast.
Common.....each, $2 25
Millers Falls..... " 2 10
Hand.
Goodell's Automatic.
Nos.....01 03 3 20
Per doz..$7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. $16 50
Bit Stock.
Standard List... 60&5¢@60¢@10¢

DRIVERS, SCREW.

Hurwood.....40-10&10¢
Standard.....65&10¢
Ajax.....70&5¢
Champion.....45¢
" Pattern.....60, 10&5¢
Clark's Interchangeable.....30¢
Edison.....60¢
Reed's Lightning.....45&5¢
Goodell's Spiral.....50, 10, 5&2½¢
Yankee Ratchet.....50¢
" " Spiral.....50&10¢
Smith & Hemenway Co.....40&5¢

EAVE TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern.....80&5¢
Central.....75&10&10¢
Southern.....75&12½¢
S, Western.....75&5¢
Terms, 2¢ for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
5-inch.....each 60c; per doz, $6.70
6 " ..... " 70c; " 8.00
75¢ discount to dealers on 2-inch' 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches..... 5 6 7
Smooth. per doz. $0.40 $0.52 $0.80
Pol'd " .80 1.00 1.20
Plan'd " 1.20 1.40 2.40

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size.....5-lb. pkgs. ½ kegs, kegs
No. 60 to 150. per lb. 6c 4c 4c
Flour..... " 5c 3c 3c

ENAMEL, IRON.

English, ½-pt. cans.....per doz. $1 50
Nubian " " " 1 80
Peerless..... 1 50

EXTRACTORS, PIG.

See Forcips, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5¢
Hooks and—
Brass.....55¢
Iron.....65&5¢

FASTENERS, STORM SASH

Schroeder's..... per doz. 1 40
Sensible..... " 1 10

FAUCETS See Cocks.

FILES AND RASPS.

Black Diamond.....70&10¢
Disston's.....75&10¢

FLUE STOPPERS—See Stoppers

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel.....90&2½¢
Wood, 4 tines, per doz.....$3.25
Coal, Coke, Cottonseed.....60¢
Hay.
Diamond, 2 tine.....60&10¢
" 3 " .....20¢
" 4 " .....50¢
Golden Eagle, 3 tine.....75¢
" " 4 " .....80¢
Digging.....70&10¢
Scoop.....50¢
Header.
Diamond, 3 tine.....66⅔&5¢
" 4 " .....65&10¢
Manure.
Diamond, 4 tine.....70&10¢
Golden Eagle.....90¢
Ore.....40¢
Spading.
Diamond.....50&10¢
Golden Eagle.....80, 10&5¢

FRAMES.

Hack Saw.
Crown.....per doz. $6 25
Miller's Falls..... " 10 20
Star..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each.....$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform...each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power. " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s....30&10&2½¢
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc......
.....50&10¢@50&10&5¢
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's.....25¢

GIMLETS.

Discount.....35@40¢

GLASS, WINDOW.

First two brackets.....98&15¢
Above " " .....90¢

GLASSES, LEVEL.

Stanley R. & L. Co.....50&5¢

GLUE.

Bulk.
B Amber.....per lb. 11 c
A White..... " 13½c
H. S. Amber..... " 15½c
Liquid.
Eagle.....40¢
Le Page's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25¢

GOODS.

Bright Wire.....95&20¢

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....40&10¢

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing.. 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $0 85
Sisal Rope..... " 1 85
Web..... " 1 75
Leather, rope tie..... " 6 50
" leather tie.... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's.....40&10¢
Engineers'.
Maydole's.....40&10¢
Farriers'.
Maydole's.....35&5¢
Machinists'.
Maydole's.....40&10¢
Nail.
Ajax.....per doz. $4 00
Calumet..... " 3 15
Cast.....per doz. $1 10@ $4 10
Maydole's.....40&5¢
Vulcan.....45&5¢
Riveting.
Maydole's.....35&5¢
Shoe.
Cast.....per doz. 75c
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....70c 80c $1.00
Magazine.....per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....80&10¢
5 lbs. and over.....65&5¢
Masons'.
Single & Double Face.....70&10¢

HANDLES.

Auger.
Common Assorted...per doz. $ 38
Peck's Adjustable... " 2 10
Roger's " ... " 4 25
Ives' " ....per set 1 35
Axe.....60¢
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted.....per doz. 24c
Coal Pick.....50&10¢
Drifting Pick.....50&10¢
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz. 48c
Blacksmiths'.....per doz. 55c@80c
Machinists'..... " 45c@70c
Hatchet.....per doz. 45c
Hay and Manure Fork.....40&5¢
Hoe and Rake.....40&5¢
Saw.
Plain.....per doz. 75c
Varnished..... " 80c
Screw Driver.
Assorted..... " 37c
Large..... " 48c
Shovel and Spade.....40¢

HANGERS.

Barn Door.
Monarch.....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phoenix, Roller Bearing.....70&5¢
Prouty, No. 315..per doz. prs. $6 35
Rival..... " " 3 65
Superb..... " " 5 50
Safety Flexible. " " 6 35
Wagner's Adjustable.....70&10¢
Warehouse.....60¢
Conductor Pipe.
Iwan's Perfection.....50¢
Eave Trough.
Baker's.....per gro. $9 35
Imperial.....20¢
Wire.....35¢
Parlor Door.
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model..... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5¢

HASPS.

Hinge, Wrought.....50&5¢
With Staples—See Staples.

HATCHETS.

Ajax.....45¢
Blood's.....50¢
Cast Claw.....per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Duffy's Barrel.....per doz. $15 00
Germantown.....60¢
Hammond's.....40¢
Roger's Ideal.....per doz. $5 25
Underhill's Star Lath.....40&10¢

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1....per doz.$ 9 75
" No. 2.... " 10 50

HINGES.

Blind.
Clark's Gravity...per doz. sets 80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....per doz. 1 65
Gate.
Clark's..... 1 2 3
Hgs & Ltch....doz. $2.35 2.60 3.65
Hinges only.... " 1.70 1.90
Latches only... " .70 .75
Knuckle.....per doz. prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....30¢
Bommer Bros. Ball B'g Floor..35¢
Bommer Bros. Spring Hinges..40¢
Chicago.....25&5¢
Columbia Dbl. Acting....40&10&5¢
Gem.....25¢
Ideal Detachable....per gro. $11.10
Matchless.....30¢
New Idea.....per gro. $8.40
Oxford.....30¢
Wrought Iron.
New Lists.....
Light Strap Hinges.....70&5¢
Heavy Strap Hinges.....75&10¢
Light T Hinges.....65&5¢
Heavy T Hinges.....70-10&5¢
Extra Heavy T Hinges....70-10&5¢
Cor. Heavy Strap 80-20-10-10-10-10&5¢
Cor. Ex. Heavy T 80-20-10-10-10&5¢
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 65
14 to 20 in..... " " 3 40
22 to 36 in..... " " 3 15
Screw Hook and Eye.
½ in.....per 100 lbs. $6 55
⅝ in..... " " 7 00
¾ in..... " " 9 45

HOES.

Garden.....70&15¢
Grub.
Ajax.....60 & 10¢
Extra.....70¢
Hazel.....per doz. $5 00
Ladies' and Boys'.....70&15¢
Mortar.....75&10¢
Planter's Eye.....62½¢
Weed.....75&5¢

HOOKS.

And Eyes.
Brass.....80&10&5¢
Iron.....65&10¢
Awning.....per gro. $1 80
Belt.
Brown's.....70&5¢
Jones'.....65&5¢
Bench.
See Stops, bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
..... per doz. $7 00@8 65
Hamilton Pattern.....per doz. 7 35
Chain.
Inch... 1/4&5/16 3/8 7/16 1/2
Per 100 $7.60-8.10 9.75 11.50 13 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10%
Conductor.
Malleable.....50&10%@55&10&5%
Wrought .....40&10%@50%
Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 2 75
Clyde's..... " 2 20
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 30
Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c
Lambrequin or Drapery, per gro. 21c
Picture .....50%@50&10%
Potato and Manure.....65&15%
Screw.
Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring.....per ℔. 5½c

HOOPS, TUB.
Ever Ready .....per case $1 70

HOSE, GARDEN.
3 ply ½ in. 35 ℔. pressure per ft....4½c
3 " ½ " 50 " " " 6½c
3 " ½ " 70 " " " 6½c
3 " ½ " 70 " " " ....8 c
4 " ½ " 80 " " " ....8 c
4 " ½ " 80 " " " ... 9½c
6 " ½ " 125 " " " ...10½c
8 " ½ " 150 " " " 12c
Cotton ½ in. 75 ℔. pressure per ft. 6c
" ½ " 150 " " " 8c

HUSKER.
Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 4.50
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos.....4000 O OX
Per doz.....$1.15 1.85 1.35
Brinkerhoff's.
Per gro.....$14 50
Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75
Johnson's.
Per gro.....$7 75

IRON.
See Metals—First column.

IRONS.
Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list) 25&5%
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 ℔. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's.
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per ℔. 4½c
" Geese..... " 4½c
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " .... " 6 25
Sutton .....each 2 60

JACKS.
Locomotive.....75&5%
Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co 25%

KETTLES.
Brass.....15%
Calldorn 45%
Copper.....per ℔. 27c
Maslin 66⅔%
Sugar .....50&5%

KNIVES.
Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15%
Corn.
Ajax.....per doz. $2 10
Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
" Folding Handle....25&5%
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 1 Blade..... " 1 30
" 6 Blade..... " 2 0
Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.
Door.
Mineral .....per doz. $0 72
Porcelain ..... " 83
Jet..... " 83

LADDERS.
Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.
Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Berger.....40&10&5%

LEADERS, CATTLE.
Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.
Cut.....50&5%
Sizes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.
Valve and Plunger 50%

LIFTERS.
Stove Cover.
Japanned.....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00
Transom.
Payson's.....70&10%

LINES.
Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz..... 9c 12c 16c 21c 28c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 22c 25c 31c
Masons', in 100-ft. hanks..doz.. 80c
Clothes.
60-ft. Jute.....per doz. $0 80
72-ft. " ..... " 1 00
60-ft. Sisal ..... " 1 30
72-ft. " ..... " 2 00
50-ft. Cotton ..... " 75
50-ft. Braided Cotton. " 80

LINING, STOVE.
In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 00	$6 25
Angular.... "	3 00	4 40
Boss ..... "	4 00	5 20
Upright.... "	2 50	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $9 00
Excelsior ..... " 2 00
Handy ..... " 2 00
Little Giant..... " 3 00
Pony, Pomeroy..... " 7 20
Washing.
Boss 1 3 5
Per doz.....$55.20 61.80 68.40
Globe, No. 1 .....per doz. 55 20
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.
See Boxes.

MALLETS.
Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.
Door.
National Rigid.....50, 10&5%
Queen Flexible.....50%
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex.
Heavy .....per doz. 1 00

MATTOCKS.
Ajax.....65&10%
Extra 78%

MAULS.
Iron. lbs. 10 12 16 18 21
Per doz. $2.60 3.20 3.80 4.20 4.65
Wood face, lbs. 10 11 12
Per doz $4.20 4.55 4.85
Wood Choppers'.
Lake Super'r & Oregon Pat. 80&10%

MEASURES.

	¼ pk.	1 pk.	½ bu.
Galvanized. per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.
Babbitt.
Alm .....per lb. 7½c
Best..... " 12 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.
First Quality.....35%
Second Quality.....35%

MILLS, COFFEE.
Enterprise 35%
Parker.....50%
Arcade 50%

MITRE BOXES.
See boxes.

MOPS.
Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.
Ball-Bearing.
Inches..... 15 17 19 21
Each $7.50 8.50 9.50 10.50
Cheap Grades.
Inches..... 12 14 16 18
Each $2.30 2.35 2.35 2.50
Clipper .....50, 10&10%
Girard.
Inches..... 14 16
Each.....$3.25 3.50
Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

NAILS.
Cut Steel.....rates, $3 00
Horse Shoe.
Ausable .....55&5%
Capewell 15%
Perfect .....55&5%
Putnam 20-5%
Star 50%
Picture.
Brass Heads .....60&10%
Judd's.....60&10%
Brads.....90, 10&10%
Furniture .....75&10%
Wire.
Small Lots.....$2 00
Carload " 1 95
Cement Coated..... 1 75

NAIL PULLERS.
See Pullers.

NAIL SETS.
See Sets.

NETTING, POULTRY.
Galvanized Before Weaving..80&15%
" After Weaving...80&15%
Cut Pieces.....65&5%

NIPPERS.
End Cutting.
Stubb's Pattern.....80&10%
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co...60%
Hoof.
Heller's .....55&5%
V. & B.....55-5%

NOZZLES.
Hose.
Gennine Boston.....per doz. $3 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
℔. 9c 6c 4c 3½c 3½c 3½c 3c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
℔. 12c 7½c 5c 4½c 4c
For 5 lb. boxes add ½c per ℔. to above prices.

OILERS.
Chase Pattern.
Brass and Copper.....50%
Zinc 75%
Engineers'
Cannon.....55%
Tin.....per doz. $2.00@$2.25
Machine.
Ajax.....per doz. $0 60
Copper Plated Steel.. " 1 30
Malleable Iron.....60, 10&5%
Tin.....per doz. 35c@45c

OPENERS.
Box.
Inches..... 10 12 14
Flat .per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75
Can.
Delmonico.....per doz. $1 20
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.
Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.
Standard Wrought .....70, 10&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.
Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00
Water.
Galvanized, qts 10 12 14
Per doz $1.75 1.95 2.25
Wood.
Cable, 2 Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.
Dripping.....80&10&5%
Fry.
Common.....80&10&5%
Acme.....90&5%
Roasting.
Brownie.....each 18c@26c
L. & H..... " 40c@51c

PAPER
Building.
Plain .....per 100 lbs. $1 00
Tarred..... " 1 05
Tarred Felt..... " 1 30
Diamond A, Red Rosin, pr roll 40
Leader, Red Rosin..... " 35
Sand and Emery.
Ajax.....70&10%
B. & A.....70&5%
Wrapping.
Grecian Express.....per ℔. 2½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern.....	70&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per lb. 6½c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c
Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45

Wrought Iron Gas Pipe
¼@½-in., black.....discount, 60%
¾@1-in. ..... " 60,10&5%
1¼-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
¼@½ " galvanized " 42%
¾@1 " " " 50%
1¼ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.40	$2.80	$3.70	$4.60

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.00	$2.30	$3.20	$4.10

Cutting.
Bernard's.....40%
Lodi.....60&10&5%
4 Tube, revolving..... " 4.25

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$7 80
Russell's..... " .. 8 00

Flat and Round Nose.
Bernard's 40%
German 65%
Lodi.....55%
Paragon.....50&10%

Gas—In.	8	10	12
Per doz.....	$3.00	$4.00	$4.00

Tinner's.
Hollow.... .....
Solid.. ..... each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	½	¼
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$3 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

George William Hoffman.
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro..$4.50
¼-lb. boxes, per doz..... 1.25
1-lb. boxes, per doz 2.25
U. S. Liquid, 8 oz. cans, per doz., $1 25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 lb cans. pr gr..$15.00
Black Silk—
5 lb. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 lb cans....pr gro. 13 00
Black Jack, ½ lb cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 75@85c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 00
3 qt. Reversible..... " 1 20

POTS, FIRE.

Bernz.....each $3 8
Clayton & Lambert's, ea..$4 75@6 2
Gate City.....each 6 2
Gem..... " 6 7

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....35%
Henis .....per doz. $1 8

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80,10&5%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....45%
Giant Pattern per doz.....$5 0
Tack—Giant..... " 3
Staple 65%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....30&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 6
Wood Wheel, 6 in.... " 1 5
Wood Wheel, 6 in., pass knot..... .... " 2 0
Hot House—Jap'd .....45&5%
Screw..... " .....45&5%
Side ..... " .....45&5%
Sash.
Clark's..... " 36
Common Sense, 2 in ..per doz $0 22
" Pattern, 2 in.. " 18
Empire..... " 20
Ideal..... " 18

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per lb. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c

Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel, braced.....90&10%
Steel, bow.....80c
Malleable Iron, heavy.....90&10&5
Hay.
Wood.....$1.00@$1 60
Lawn—Wood.
Common.....per doz. 2 05
Automatic ..... " 5 45
Gibbs'..... " 3 20
Jumbo, 36 teeth..... " 6 00

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned. .70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.00	$1.20

Rea's Impro'd Self Piercing copper, pr d'z. 1.50
Steel per doz.. .95 1.0
Nickel Plated 1.35 ...
and Ringers—Hog.
Blair's Rings .....per doz. $0 45
Blair's Ringers..... " 60
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 45
Hill's Ring, boxes..... " 40
Major Rings ..... " 60
Perfect Ringers..... " 80
Wolverine Rings..... " 1 20
Wolverine Ringers... " 60

Fruit Jar.
White.....per lb 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....66⅔@10%
Hame ....per lb. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per lb. 11½c
¼, 5-16-in. Com. in coils .. " 12c
¼, 5 16 Imperial in coils . " 21c
Sewall & Day Sisal Rope.
Rates..... 9½c
Sisal.
Eagle, rates.....per lb. 7½c
Pure Manila.
Rates..... " 11½c

RULES.

Boxwood.....70%
Ivory.....45&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%
Butchers'.
Disston's..... 35&7½%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
Keyhole—Disston's.....25&7½%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%
Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50
Cabinet.
Ajax.....per doz. $2 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron ....60&5%
Wood, white maple..per doz. $3 40
Hand—Wood.....30%
Hand Rail.....80&10%
Jack .....85&10&10%
Lag or Coach—all sizes, gimlet pointed.....75&10%
Saw—entennial.

Nos.	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright Steel.....87, 10&10%
R. H. Blued Steel.....90&5%
F. H. Jap'd Steel.....83⅓&5%
F. H. Brass..... .....88&5%
R. H. Brass.....90&5%
R. H. Nickel Plated.....80%

SCYTHES.

Clipper, grain.....per doz. $8 15
Clipper, grass ..... " 6 30

SHAVING SETS.
Smith & Hemenway.....60%

SETS.
Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Buck Bros.. " 1 30
Cup Point, knurled, pr. doz. 70c@$1.20
Rivet.
Farmers'.....per doz. $1 45
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's..... " 4 80
Nashe's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.
Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.
Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.
Pruning.
Buckeye, No. 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat.. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union..... per doz. $6.75

SHIELDS.
Expansion Bolt Shields.....50&10%

SHOES.
Conductor.
5-inch.....each 28c; per doz. $ 3.30
6 " ..... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Ajax.....per doz. $5 25
No. 4 Golds..... " 6 25
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Gold Hibbard's.....per doz. $9 25
C. H. Conover's..... " 7 75
Beckwith's..... " 7 75
Hickory..... " 6 25
Greenleaf's..... " 5 75
Columbus..... " 5 00
Ames' new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $6 00
Long Handle..... " 5 00

SINKS.
Cast Iron.
Painted..... 50%
Enameled, White.....60-10&5%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.
Double Ring, Bush.....per doz. $6 75
Patent Loop " .... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.
Hernisch's.....40&5%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.
Nos..... 1 2 3 4
Per doz.... 28c 33c 35c 40c
Reliance.
Per doz.....light $1.45; heavy $2.20
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.25
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.
Steel and Iron.....85&5%
(Add for Bluing, $2.50 per doz., net)
Mitre.
Stanley's No. 12.....60%
Try.
Stanley's No. 20, new list...45&10%
" No. 12 and 14.....55%
Try and Bevel.
Stanley's.....55&5%
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom's.....70%

SQUEEZERS, LEMON.
Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ..... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.
Blind.
Barbed.....per ℔ 9¼@9¾c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 20
Galvanized..... " 2 50
Netting.
Galvanized. .....per 100 ℔ 3 70
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85-10&5%
Extra heavy.....85&5%

STEELYARD.
Discount 25%

STONES.
Axe.
Hindostan.....per ℔ 5¾@7c
More Grits..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan.....per ℔ 6¼@6½
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26
Sythe.
Black Diamond.....per gro. $7 75
Clear Grit..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille ..... " 7 00
White Mountain..... " 6 50
Willoughby Lake..... " 6 25
Red End..... " 3 15

STOPS, BENCH.
Hotchkiss'.....per doz. $3 50

STOPPERS, FLUE.
Common.....per doz. $0 32
Crown ..... " 45
Gem, flat, painted..... " 72
Gem, cor'd, decorated.. " 65
Kirch's..... " 90
Peerless..... " 63
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.
Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.
Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's..... " 6 25

SWIVELS.
Malleable Iron.....per ℔ 6½c
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&10%
Gimp.....90&35%
Upholsters' Cut.....90&40&5%
Upholsters' Wire.....90&35%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.
Asses' Skin.....35%
Bend Leather.....15%
Patent Leather.....15%
Lufkin's Steel.....25%
Lufkin's Metallic.....25%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.
Bale.
Single Loop.....80&10%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.
Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%
Minature.
Smith & Hemenway 25%

TRAPS.
Fly.
Balloon.....per doz. $0 90
Harper's..... " 1 00
Game.
Newhouse..... .....45&5%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $5 20
Mouse and Rat.
Wood Choker.....per hole $0 10
Tin Choker..... " 08
Delusion.....per doz. 75
Imitation Sight, Rat. " 60
Marty Rat..... " 6 40
Marty Rat Imitation.. " 3 30
Marty Mouse..... " 3 00
Marty Mouse Imitation " 1 80
French Automatic.....each 3 30

TROWELS.
Brick.
Standard.....40%
Brade's.....15&5%
Disston's.....40%
Rose's.....25%
Plasterers.
Standard.....60%
Disston's.....40%
W. & McP.....35%

TRUCKS.
Bags .....each $1 70
Handy..... " 1 50
Warehouse.....60&5%
No..... 1 2 3
Half Ironed.... $2.65 $3.40 $5.00
Full Ironed.... 3.90 5.75 6.75

TUBS, WASH.
Standard. Ex.
Nos..... 3 2 1 large
Per doz....$4.40 $5.20 $6.10 $ 8.20
Dowell.
Per doz.... 5.30 6.20 7.10 9.30
Cedar.
Per doz.... 6.10 7.10 7.90 10 80
Indurated.
Per doz.... 6.90 7.65 9.30 11.20
Galvanized.
No..... 1 2 3
Per doz.....$5.25 $5.75 $6.50

TWINE.
Per ℔
3-ply Cotton Wrapping.....18c
4 " " " 18c
4 " " Extra Wrappings.... 22c
4 " " " Hvy. Wrappings. 20c
4 " " Wrapping on tubes...22c
3 " " " " cones.. 20c
4 " " " " " ...20c
India Hemp, ½-lb. balls.....17c
" " ¼-lb. " 16c
" " ⅛-lb. " .....doz. 63c
2-ply " ½-lb. " 11c
3-ply " ½-lb. " 10c
Jute Wrappings, ½-lb. balls.....11c
Jute Wool, 1-℔. balls.....5c
Seine.
Nos..... 6 9 12 15+
Soft, per ℔ 23 20½ 20 19
Med. " 20½ 20 19
Hard " 21 21 20
Staging, ½-lb. ball, size 21.....20½c
" " " " 24.....20c
" " " " 27.....20c
Bagging " " 21c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
130-strand 6½c
200 strand. 7½c

VISES.
Bonney's.....35%
Cheney's.....30%
Parker's Oval Slide.....
.....50, 10, 2½% @ 50 10, 5, 2½%
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....80&5%
Adam's Mechanics'.....each 2 65
Williamson Universal.....60%

WARE.
Cast-Iron Hollow.
Ground.....60&10%
Unground .....70&5%
Extra Finished.....60&10
White Enameled.....60, 10&5%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ½ ⅝ ¾ ⅞ 1 1⅛ 1¼ 1½
7½c 5½c 4c 3½c 3½c 3½c 3½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ⅝ ¾ ⅞ 1 1⅛ 1¼ 1½
8½c 6½c 5c 4½c 4½c 4½c 4½c 4½c

WASHING MACHINES—See Machines.

WEDGES.
Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.
Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.
Hitching .....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $21 00

WHEEL BARROWS.
Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELS.
Corundum .....70&10&5%
Emery ....75&5%
Well In. 8 10 12 14
Per doz.....$1.90 $2.20 $3.00 $5.50

WIRE.
Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.10 $2.40
Less than car " .. 2.10 2.40
Brass.
In coils.....20%
In 1 ℔ spools, new list.....50&10%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10% 33⅓%
In 1 ℔ spools, new list ...50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $1.95
Nos. 6 to 9, Galvi'd... " 2.25
Hair—New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles..... 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools .....per ℔..26c
Plain—Small lots..... $2.00
Car lots 1.95
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard.....75%
Alligator ....85&10%
Always Ready.....60%
Bemis & Call No. 2 Improved Pipe Wrenches..... .....80%
Coe's Standard.....50&10%
Girard's Agricultural.....85&50%
Wescott's "S".....43½%
Malleable "S".....per ℔. 05½c
Malleable..... " 05½c
Stillson Pipe .....70&5%
Trimo " 80%

WRINGERS.
Clothes.
No. 22, Guarantee....per doz.$29 50
No. 110, Guarantee.... " 29 50
No. 110, Brighton..... " 18 00
No. 22, Pioneer..... " 18 00
No. 2, Superb.... ... " 17 50
No. 730, Easy..... " 24 00
No. 500, Royal ..... " 26 00
No. 350, Universal.... " 23 50
No. 300, Novelty..... " 23 50
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Hand Screws

Grand Rapids Hank Screw Co., Grand Rapids, Mich

Hangers—Trouser

Pullman Mfg. Co., Rochester, N. Y
Taplin Mfg. Co., New Britain, Conn

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha

Hay Carriers
Stowell Mfg. & Fdy. Co., Milwaukee

Heating Appliances
Nat'l Heatg Appliance Co., Utica, N. Y

Heaters—Steam and Hot Water
Boynton Furn. Co., New York
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Haynes-Langenberg Mfg. Co., St. Louis
Kellogg-Mackay-Cameron Co., Chicago
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges
Columbian Hdw. Co., Cleveland, O

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Kitchen Utensils
Avery Stamping Co., Cleveland, O
Taplin Mfg. Co., New Britain, Ct

Knives—Pocket
Keferstein, H. O., Barberton, O

Lanterns
Berger Mfg. Co., Canton, O
Pritchard-Strong Co., Rochester, N. Y

Levels
Baker-McMillen Co., Akron, O
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lighting Systems
Bolte & Weyer Co., Chicago, Ill
Detroit Heating & Lighting Co., Detroit, Mich

Lightning Rods
Security Lightning Rod Co., Burlington, Wis

Locks
Taylor & Boggis Fdy. Co., Cleveland, O

Mail Boxes
Slick-Williams Co., Indianapolis, Ind
Royal Mail Box Co., Cleveland, Ohio
Signal Mail Box Co., Joliet, Ill
Smith Bros. Mfg. Co., Chicago, Ill

Meat Choppers
Enterprise Mfg. Co. of Pa. Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

Metal Lath
Bostwick Steel Lath Co., Niles, O
Wheeling Corrugating Co., Wheeling, W. Va

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

Miters
Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Motor—Faucet Water
Divine Water Motor Co., New York

Nail Pullers
Smith & Hemenway, Corp., Ltd. New York

Nuts
American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O
Garland Nut & Rivet Co., Pittsburgh, Pa

Oil Cans
Cooney & Geiger, Indianapolis, Ind

Paint—Aluminum
Silver Leaf Stove Polish Co., Indianapolis, Ind

Paints
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Pistols
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Planes
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., New Britain, Ct

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa

Registers
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schwab & Sons Co., Milwaukee, Wis
Stowell Mfg. & Fdy. Co., Milwaukee, Wis
Tuttle & Bailey, New York, N.Y
United States Register Co., Battle Creek, Mich
Walworth Run Fdy. Co., Cleveland, O

Rifles
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Rivets
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Roofing—Asphalt
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
Kanneberg Roofing & Ceiling Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

Rules
Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sad Irons
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Safety Razors
Gillette Safety Razor Co., New York, N.Y

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw and Saw Sets
Atkins, E. C. & Co., Indianapolis, Ind
Disston, Henry & Sons, Philadelphia, Pa

Scales
Beckman Bros., Des Moines, Ia
Osgood Scale Co., Binghamton, N.Y

Screen Door Check
Columbian Hdw. Co., Cleveland, O
Pullman Mfg. Co., Rochester, N.Y

Screen Door Sets
Columbian Hdw. Co., Cleveland, O

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O

Screws—Hand
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O

Screw Drivers
North Bros. Mfg. Co., Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

Scuttle Openers
Bickelhaupt, G., Skylight Works, New York, N. Y

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
Kinsey Mfg. Co., Dayton, O

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shelf-Brackets
Atlas Mfg. Co., New Haven, Ct

Shelving—Hardware
Heller & Co., Mont Clair, N. J

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck, Peoria, Ill

Skylights
Bickelhaupt, G., Skylight Works, New York, N. Y

Skylight Gearing
Bickelhaupt, G., Skylight Works, New York, N. Y
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Soldering Furnaces
Bickelhaupt, G., Skylight Works, New York, N. Y
Burgess Soldering Furnace Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit
Diener, Geo. W. Mfg. Co., Chicago
Turner Brass Co., Chicago, Ill

Soldering Irons
Emmelman Bros. Mfg. Co., Indianapolis

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O
Globe Machine & Stamping Co., Cleveland, O

Steel Brick and Stone Siding
Wheeling Corrugat'g Co., Wheeling, W. Va

Stoves and Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Born Steel Range Co., Cleveland, Ohio
Clark, Geo. M., Chicago, Ill
Foster Stove Co., Ironton, O
Gem City Stove Co., Dayton, O
Kontny, John, Chicago, Ill
Landay Steel Range Co., St. Louis
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Ringen Stove Co., St. Louis, Mo
Schneider & Trenkamp, Cleveland, O
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Clark, Geo. M., Chicago, Ill
Fanner Mfg. Co., Cleveland, O
National Stove Co., Loraine, Ohio
Pittsburgh Stove & Range Co., Pittsburgh, Pa

Stoves—Gasolene
Clark, Geo. M., Chicago, Ill
National Stove Co., Loraine, Ohio

Stoves—Oil
National Stove Co., Loraine, Ohio
Standard Lighting Co., Cleveland, O

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Casters
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stove Lifters
Kramer Bros. Fdy. Co., Dayton, O

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo
Wheeling Corrugat'g Co., Wheeling, W. Va

Stove Pipe Radiators
Rochester Radiator Co., Rochester, N.Y
Sterling Air Radiator Co., Chicago, Ill

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Silver Leaf Stove Polish Co., Indianapolis, Ind.

Stove Repairs
Brauer, A. G., St. Louis, Mo
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago
Morris, Stove Repair Co., Chicago, Ill
North Western Stove Repair Co., Chicago
Reeves, S. V., Philadelphia, Pa

Stove Trimmings
Fanner Mfg. Co., Cleveland, O

Strainers—Sink
Vreeman, F. H. & E. B., Chicago, Ill

Sugar Kettles
Sperry & Co., Batavia, Ill

Tanks—Oil and Gasoline
Smith Bros. Mfg. Co., Indianapolis, Ind

Tapes
Lufkin Rule Co., Saginaw, Mich

Thermostats
Howard Thermo. Co., West Oswego, N. Y

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Canton Steel Roofing Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa

Tinware
Stuber & Kuck, Peoria, Ill

Trowels
Atkins & Co., Indianapolis, Ind
Disston, H. & Sons, Philadelphia, Pa

Tubs and Pails
Wheeling Corrugat'g Co., Wheeling, W. Va

Valve Regulators
Howard Thermo. Co., West Oswego, N. Y

Ventilators
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
Waverly Woodenware Wks., St Joseph, Mo
White Lily Washer Co., Davenport, Ia

Wire Anchors
Lenawee Mfg. Co., Adrian, Mich

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale—Hardware stock of about $5,000 on Mesaba Range, sixty miles from Duluth; $30,000 yearly business; good profits; good reason for selling. Address "Mesaba," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

For Sale—My interest, in full or in part, in retail hardware business in good live town in Northern Michigan; stock company capitalized at $15,000.00; hold position of manager; purchaser to take my place as manager. Address Box 915, cave of AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

For Sale—One-half or whole interest at the largest hardware, implement, heating and plumbing business in the state of Iowa, for size of town; invoice $8,000.00 to $10,000.00 stock; county seat, 2,000 inhabitants, good farming section, two railroads; rent reasonable, in fact cheap; best of agencies. It will pay you to write us. Address Hoyt-Lawyer, West Union, Iowa. 23

For Sale—Clean stock of general hardware, stoves, buggies, small farm tools, etc.; sales $40,000.00 per annum; fine double stoves; rent reasonable; an opportunity seldom offered; large territory; fine farming country. If interested, write Fred J. Cook, Fowlerville, Livingston Co., Mich. 23

Wanted—Partner with some knowledge of tin and repair work; town of 1,000; Only two hardware stores in town; located in southern Minnesota. Address "Bargain," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

For Sale—Stock general hardware, stoves and tinner's tools, invoicing about $1,800, includes fixtures containing 300 box drawers; good location, southern Indiana, population 7,000; three railroads, good farming land surrounds this city. Address, Box 19, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

For Sale—A well established hardware business, $30,000; a good chance for a hustler. For information, address, O. Richter, 599 Seventh St., Milwaukee, Wis. 22

For Sale—One-half interest in the best paying hardware, implement, heating and plumbing business in the state of Iowa. Our books will show our net profits each year. This will bear investigating. Can give the best of reasons for selling. Invoice $9,000 to $10,000. Address "Good Reason," care of THE AMERICAN ARTISAN. 21

For Sale—The best $2,500 stock of hardware and tinshop stock and tools. The only stock in town of the kind in North Central Illinois. Trade mostly cash. The best farming county in state. No trade considered. A good chance for a tinner. Rent is reasonable. Write if you mean business. Address E. Z., care THE AMERICAN ARTISAN. 21

For Sale—Stock of hardware, stoves and ranges, plumbing and heating, which invoices $6,000 to $7,000; good town in farming country; population 700. Address Klima Bros., Adams, Minn. 21

For Sale—Hardware and harness stock in small town doing good business; stock of about $2,500; can put into partnership with implement business if desired; stock for cash only; will rent or sell separate house and store building or consider some trade on these; would like to go west; this is a good investment. Address C. F. Troeller, Larabee, Iowa. 21

Wanted—To trade a new brick building, 25x50, two-story, full size basement; central location in town of 4,000; rents for $95 per month, for a stock of hardware in Iowa, Dakota or Minnesota. Address A. L., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 21

For Sale—A small stock of hardware, tinners' tools, and store building. Address, Box 211, Spirit Lake, Iowa. 20

Wanted—To exchange an equity in an Iowa farm for a good hardware business. Address, R. W. N., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

For Sale—A fine stock of hardware; best line of stoves, paints, oils, and a first-class tin shop in connection; best location in city; brick building built for hardware; located on corner of two of the best streets in town. Best farming country in Nebraska. Stock will invoice about $8,000. About 4,000 inhabitants. Will sell for all cash or part good land. Address, P. G., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

For Sale—Stock of furniture, stoves and ranges, queensware carpets and house furnishing. Stock in fine condition. Location is in finest climate in United States. Best of reasons for selling. Address, Lock Box 141, Glenwood Springs, Colo. 20

For Sale—A first-class clean stock of hardware, implements, stoves, wagons and buggies in a good new town of 1,200. Fine country trade; good farming as there is in the state; 35 miles west of Indianapolis. Fine shipping facilities; two railroads cross. Stock invoice about $6,000. Will rent building, size 50x100, two stories; elevator; everything up-to-date. If you want to buy investigate this at once. Nothing but cash buyers need apply. Address, "Cash Buyer," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

TINNER'S TOOLS.

For Sale—A second-hand set of tinner's tools, also one set of Oster pipe threading stocks which will cut from ¾ to 1½-inch pipe. Address A. S. Bloedel, Tabor, Iowa. 21

For Sale—A No. 2 30-inch P. S. W. stove pipe former. Cheap if taken at once. Address Joe Lauth, Pontiac, Ill. 21

For Sale—A 22-inch square shear in good condition; a bargain if taken at once. Address, M. V. Brickey, Hoopeston, Ill. 20

Wanted—A 30-inch square shear, must be in good condition. Also a cornice brake. Quote prices. Address, Koch Brothers, New Baden, Ill. 20

HELP WANTED.

Wanted — First-class experienced stove salesman, acquainted with Ohio trade. Address Pittsburgh Stove & Range Co., Pittsburgh, Pa. 23

Wanted—By Jan. 1, 1906, tinner; must be good jobber and furnace hand; must be capable to run tin shop; will give part interest and good wages; don't answer unless able to fill the position; married man preferred. Address Box 97, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

Wanted—An experienced young stove salesman to travel in Illinois and Iowa; a good standard line; references required. Address Box 605, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

Wanted—Salesman; good territory for successful malleable range salesman; would consider energetic young man with retail experience. Address Peerless Steel Range Works, Chicago, Ill. 23

Wanted—A good all around tinner who also understands gravel roofing; must be sober and energetic; good wages and steady work to the right man. Albert B. Guenther, Owensboro, Ky. 23

Wanted—An honest and reliable all around tinner, hardware, pump and general utility man; one that can come well recommended; a steady job for the right man; write, stating wages wanted. Address A. S. Leffingwell & Co., Brighton, Colo. 23

Wanted—Three good all-around tinners; steady work. Address Hoernel Hdw. Co., 311 Sixth St., Racine, Wis. 23

Wanted—A hardware traveling salesman for southwestern Wisconsin. Apply Hoernel Hardware Co., Racine, Wis. 23

Wanted—At once, two practical cornice men; steady employment; good salary. Address LaCrosse Steel Roofing & Corrugating Co., La Crosse, Wis. 23

Wanted—A good tinner and slater; pay $15 per week; man with family to locate in good city of 7,000. Living and rent cheap. Address, Chandler & Lee, Coldwater, Mich. 22

Wanted—A plumber and tinsmith; must be strictly sober, to do some job work, but mostly building acetylene gas machines and doing gas fitting. Would be willing to sign contract for one year at $80 per month. Address Dayton Bros., King City, Monterey Co., Calif. 22

Wanted—Salesmen for Illinois, Texas and Oklahoma to sell a well known trade mark line of malleable ranges. Only applications from men with experience and acquaintance in the territory will be considered. Address, "Malleable," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—Hardware salesmen to carry pocket sample as side line. Sells at sight to every hardware dealer. Ten per cent commission. Address, A. Clausing & Co., 1089 Third St., Milwaukee, Wis. 22

Wanted—A good all around tinner and furnace man; prefer one who also can do plumbing and hot water heating. Thirty cents per hour, and a steady job year around to one who suits. Write full particulars. Address, W. L. Grimes, Batavia, Ill. 22

Wanted—An A1 experienced stove salesman acquainted with the trade in Wisconsin for well established line. Good salary. Address, B. S., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—Tinner to take charge of tin shop in a western progressive city. Must buy material outright. Will rent room and tools. Fine opportunity for a good all around tinner. Address "Tinshop," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—A good all around tinner by January 1st. Give references, age, weight and nationality. Married or single. State wages in first letter. Address, "Tinner," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—At once for a country hardware stove and tinware store, a clerk that is a good salesman. When writing state what wages expected. Address, "Country Clerk," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—At once a good all around tinner and plumber, married man preferred, one that is able to run a country tin shop, which is in connection with hardware. Must have some experience in hot water, steam and hot air heating. Address, "Tinner and Plumber," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—Tinner that understands furnace and general work; steady job; state wages, also age, or no attention paid. Address "Steady," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 21

Wanted—A tinner and all around man in a shop in connection with hardware store. Steady job the year round; must furnish reference as to honesty and character and state wages and experience; must be sober. Town of 7,000 and no saloons. Must have man at once. Address J. V. Hyder, York, Neb.

Wanted—An all around tinner and furnace man; steady place to the right man. Address Fichtenmuller Bros., Farmington, Iowa. 21

Wanted—At once, a young man of ability to run jobbing tin shop; must come well recommended and be a hustler. Steady work. E. L. Sommers, 7105 So. Chicago Ave., Chicago, Ill. 21

Wanted—A good tinner and furnace man, with some knowledge of plumbing. We offer a good steady job in a good town and pay $2.50 a day. Address Falkenhainer & Co., Algona, Iowa. 21

Wanted—Several first-class experienced salesmen to represent us on the road. Write or call on Trout Hardware Co., 174-176 Lake St., Chicago. 21

Wanted—A cornice maker that can figure and work from plans; must be a sober man. Address Wm. Brown, S. 170 Post St., Spokane, Wash. 21

Wanted—A good tinner for southern Wisconsin. Wages 30 cents per hour. Steady work guaranteed. Married man preferred. Answer if you mean business, and enclose stamp for reply. Address S., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

Wanted—Two men at once who understand plumbing and heating, or tin work. Steady job to the man that will take interest in my business. Good wages. Address, "Illinois," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

Wanted—A first-class tinner who is good job worker. Good wages. Nine hours. Steady job. Address, Jno. F. Cartwright, Bowling Green, Ky. 20

SITUATIONS WANTED.

Wanted—A position with a hardware and implement firm as tinner and all-around man. I am 34 years old and married. I can do tin work, furnace work, plumbing, steam and hot water heating. Can also work on farm machinery. I want plenty of work at good wages. Fully explain the position in first letter. Address "Letter," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

Wanted—A position by a good all-around tinner who understands furnace work and tinning and spouting, all kinds of roofing, and can do plumbing; single man, age 35 years, strictly honest and sober. Address M. B. Welton, Athelstene, Mearnett Co., Wis. 23

Wanted—Situation as traveling salesman for hardware or tin and sheet iron supply house, or a stove and furnace manufacturer. Prefer territory in Colorado or Western coast states. Have had five years' road experience and twelve years in retail business. Will furnish best of references. Address Box 200, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

Wanted—Situation as clerk in hardware store. Five years' experience, references furnished. Address, Lock Box C, St. Charles, Winona Co., Minn. 22

Wanted—Situation as salesman for good furnace house, by an A1 furnace man. Have been installing furnaces for ten years; at liberty after Jan. 1st; best of references. Address, "Liberty," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Position Wanted—By an up-to-date German American tinner; can also do plumbing and furnace work; age 30, single, sober and reliable; eight years' experience at inside and outside work; references furnished if desired. Address P. O. Box 371, Willow City, N. D. 21

Wanted—A position with a wholesale house either in the house or as traveling salesman in a western territory, near Denver preferred. Can furnish best of references. Have been in retail hardware business five years, American, 27 years old and married. Address M. A. R., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 21

Wanted—After January 1st, tinner with knowledge of general job work; must have at least three years' experience; give nationality, age, weight and references; state wages; married or single, and when you can start to work. Address L., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 21

Wanted—Position as tinner on or before Jan. 2, 1906; have 3 years' experience at the trade; can do furnace work, tin and galvanized roofing, spouting, tin work, etc. Am strictly honest, sober and reliable. Wisconsin preferred. Address, Tinner, Box 222, Manteno, Ill. 20

Wanted—Position after Jan. 1st, by young man, aged 32, with twelve years' experience in hardware trade with jobbers. Last few years on the road; at present employed by one of the largest jobbers in the country. Prefer position with live retailer. Was never discharged. Best of references. Address, Box B. C., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 20

SPECIAL NOTICES.

WANTED

Salesmen for states of Pennsylvania, New York, Indiana, Illinois, Iowa, Wisconsin and Minnesota, having experience in the sale of Metal Ceilings, Eave Trough, Conductor Pipe, Steel Roofing and Tin Plate. State past experience and salary wanted. Address, Sales Manager, care of box 472, Canton, Ohio. 3t 23

WANTED

Two salesmen to represent a representative boiler and furnace manufacturer, on a commission basis. One for New England states, the other for New York and tributary territory. A good opening for aggressive salesmen. Address A. N. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

WANTED

Experienced Furnace Dealer in one large city of each state, to handle our line exclusively and act as state agent. Full particulars furnished on application. Address "Up-to-Date," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Illinois. 1t 23

WANTED

For general Western territory, traveling salesman for a new line of Steel Ranges having special patented features, guaranteed salary with liberal commission. Give references in first letter. Address "ÆR-FLAME," P. O. Box 683, New York City. 2t 22

WANTED

To exchange—Good improved Iowa or western Illinois farm for stock of hardware or hardware and implements. Address "Implements," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Illinois. 4t 22

WANTED

A first-class furnace salesman, one of experience and with a practical knowledge of the business. Address LENNOX FURNACE CO., Marshalltown, Ia. 3t 21

WANTED

Two salesmen who have had road experience selling furnaces and boilers. Must be practical. Address L. J. Mueller Furnace Co., Milwaukee, Wis. ufn

WANTED

Salesmen who understand the furnace business to sell well known line of side wall registers. Will give state agencies. A good proposition for live salesmen. For further information address "Register Salesman," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. u. f. n.

WANTED

Wood Pattern Makers on Stove work. Address "Pattern Maker," care of AMERICAN ARTISAN. u. f. n.

WANTED

Wanted for 1906—Four, first-class experienced stove salesmen with established trade, for the States of Iowa, Wisconsin, Michigan, Kentucky and Tennessee. Residents of the various States preferred. Give experience and references. Address A-27, care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Illinois. 2t 23

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To manufacture on royalty or buy patented article of black or galvanized sheet iron. THE C. C. FOUTS MFG. CO., Middletown, Ohio. 5t 22

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Any salesman unengaged for 1906 who is acquainted with the hardware trade is invited to secure our proposition for representing several factories. Address "B," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 3t-20

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On or before January 1st, 1906, several first-class salesmen to represent a leading maker of furnaces and boilers. Permanent position at good salary to right men. Address S. S. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

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I am a practical experienced stove manufacturer. I know how good goods should be made and I know how to conduct an office. Have had considerable experience in manufacturing steel ranges. I am looking for an opening where my services will be appreciated. Address "Tom," care of THE AMERICAN ARTISAN, CHICAGO. ufn 22

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We like to receive letters from our patrons. They make us feel good. Last week we inserted here a letter received from Michigan. Here is

ONE FROM ILLINOIS

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Gentlemen:—

"I have just finished blackening thirty-five cast stoves, all reservoirs, ranging in weight from 250 to 500 pounds. I blackened the thirty-five stoves, gave them two coats of polish, with one five-pound can of Black Silk Stove Polish. I have frequently used three cans of other makes to do the same work without nearly as satisfactory results.

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It is light, easily adjustable and enduring.

The plate is stamped from best nickled steel and is corrugated to prevent warping. The stem consists of forged steel sharply pointed, notched to engage edge of plate, and is held absolutely in place.

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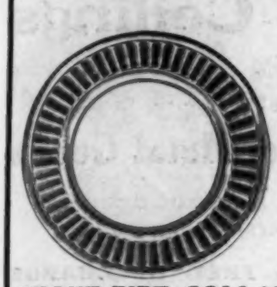

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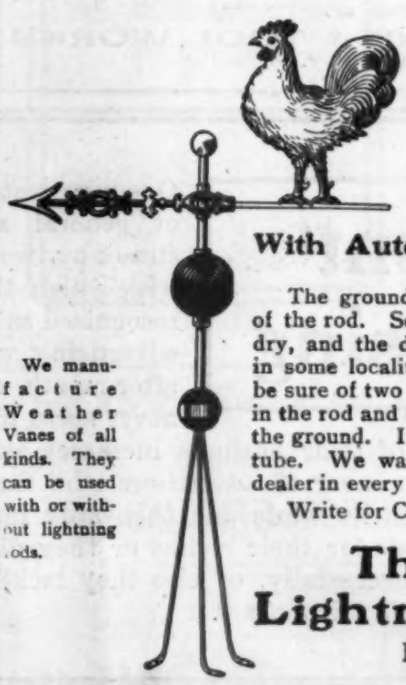


We manufacture Weather Vanes of all kinds. They can be used with or without lightning rods.

The ground rod is the most important part of the rod. Sometimes the ground is perfectly dry, and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. It is made of ⅝-inch pure copper tube. We want to furnish it to a responsible dealer in every town or city in the United States.

Write for Catalogue. 40 pages free.

The Security Lightning Rod Co.
Burlington, Wis.

FLAT CRIMP EXPANDING ELBOWS

No. 1 No. 2 No. 3

Round Corrugated
Plain Round

Octagon
Polygon

Square "H"
Square "B"

PATENTED JUNE 4, 1895

Made of One Piece

None Genuine
Without Signature

F. Dieckmann

Station B, CINCINNATI

Outside Bead

Imitations Are Recommendations

We make the one-piece miter that others are trying to imitate. Made of special galvanized stock, true to size, shape and in all styles, single and double bead, inside or outside turn. No obstruction in slip joint.

Write for information.

Get the original.

J. E. Whitacre Mfg. Co.
ROCKFORD, ILL.

Inside Bead

No Dust, No Dirt

Pleases everybody

Quick Seller

Order at once to insure prompt delivery.

Send for prices.

HILL DRYER CO.
Worcester, Mass., U. S. A.

Slip Roll Former

Tools for Sheet Metals

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

NIAGARA MACHINE & TOOL WORKS
BUFFALO, N. Y.

Persistent Advertising

One who watches carefully the pages of general advertising mediums is struck by two things; the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—*Advertising Experience.*

ASK YOUR DEALER FOR THE

Sem

Soldering Furnace

AND YOU WILL MAKE NO MISTAKE

Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequalled—Unrivaled—Safe—Sure—Durable.

GALVANIZED IRON, BRASS OR COPPER RESERVOIR.

Equipped with Cylindrical Slotted Burner.

MADE ONLY BY

BURGESS SOLDERING FURNACE CO.

COLUMBUS, OHIO, U. S. A.

IMPROVED OIL CAN FAUCET

J. M. LITCHFIELD

227 WATER ST., NEW YORK

"Why in Halifax Don't You Send up and Fix those Pipes?

No. 31 Torch $2.50 Net

You know we can't get along without water. You haven't torches enough to care for all! Great Scott! Do you mean to say you haven't anticipated troubles of this kind? Well, well, you can cancel my order. Mr. Johnnie-on-the-Spot can do it now." This is only a sample of what frequently happens and away goes your customer and the prospective profits. The No. 31 is the best torch on earth for this work and you should have several on hand. Jobbers sell at factory price under our guarantee "Your money back if you are not pleased."

Clayton & Lambert Manufacturing Co.

Detroit, Mich., U. S. A.

The Harrington & King Perforating Co.

TINNERS You can save the price of a No. 10 Furnace in one year's time in the saving of gasoline over other styles; also many dollars' worth of time.

NOISELESS, NO ODOR, NO SMOKE

More Heat with Less Fuel.

Greatest Range of Heating, 3 to 12 lbs.

Copper Indoors or on a Roof.

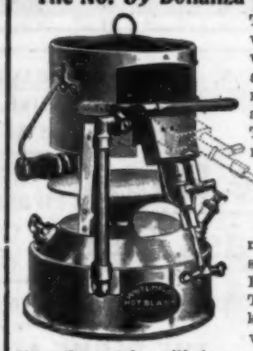
Order direct of your jobber, or we will ship direct for $6.50.

GEO. W. DIENER MFG. CO., 217 E. Lake St., Chicago

You
Tell the Tale.
THE AMERICAN ARTISAN
Will Spread It.

Hottest On Earth.

The No. 39 Bonanza Furnace



That is what we give you when buying a No. 39 Furnace for all around work. The tank is made of seamless drawn brass. We make many styles of Furnaces and Torches for kerosene as well as gasoline. Our catalog will give you full particulars. Order through any jobber, or send us $4.50; we will ship direct.

THE TURNER BRASS WORKS,
26 No. Franklin Street, - Chicago

$25 ON 5 TON is what you can save

We make all kinds of SCALES.

WRITE FOR PRICES

Also B. B. PUMPS and WIND MILLS

BECKMAN BROS., Des Moines, Ia.

Tinners, Roofers, Linemen

IT IS A GREAT COMFORT FOR THEM TO HAVE

THE GASOLINE SOLDERING IRON & BLOW TORCH

When the weather is cold and quick action is imperative. This tool can be adjusted and is ready for use in an instant. It can be carried in any lineman's belt, can be accommodated in an ordinary tool kit, and costs comparatively little. Your customers will buy no torches or soldering furnaces when you explain to them the merits of this tool.

WRITE FOR CATALOGUE

EMMELMANN BROS. MFG. CO., INDIANAPOLIS, IND.

Mention the American Artisan

No metal worker of any sort can keep up with modern progress unless he is benefited by modern facilities that come to him through the

Big Warehouse.

In our warehouse we have metal products which the greatest minds have initiated and highest skilled labor has executed. To supply our needs, or rather the needs of our buyers, machinery of most recent types, mills of great capacity, and men by the thousands work constantly. Manufactured in large quantities and under most favorable conditions our

"Star Brand" Products

in

Brass, Copper, Bronze, German Silver, Platers' Metal, Yellow (Muntz) Metal, Etc.,

are the best and cheapest products in their line. The dealer who handles them can stand any competition, profiting by the advantages upon which we are based.

WRITE FOR OUR STOCK CATALOGUE.

U. T. HUNGERFORD BRASS & COPPER CO.

NEW YORK, N. Y.

CORNICE COPPER

Soft and Cold Rolled—all sizes. Boiler Sheet Copper and Bottoms. All kinds of Tubing, Rod, Sheet and Wire in Copper and Brass

Send for Stock List of what we carry in our store.

CHICAGO BRASS COMPANY

Successor to Benedict & Burnham Brass and Copper Co.

211-213 LAKE STREET, CHICAGO

SHEET BRASS, All Tempers. BRASS and BRONZE DRILL RODS.
BRASS and COPPER WIRE. GERMAN SILVER SHEET and ROD.
BRAZED and SEAMLESS TUBING.

Eagle Brand Copper Rivets and Burrs, Brass Escutcheon Pins

Brass Butts, Desk Narrow, Broad Middle, Ball Tipped and Water Closet

Brass and Iron Jack Chain, Brass Safety Chain, Etc.

Catalogues on Application.

NEW YORK **THE PLUME & ATWOOD MFG. CO.** CHICAGO

The "STAR" Ventilator

Trade Mark M&E

Storm Proof, Effective. For ventilation of all kinds of buildings, both public and private.

Merchant's Metal "Spanish" Tiles and "Gothic" Shingles

Are the most Ornamental Roofing made in metal. We are makers of High Grade Roofing Tin

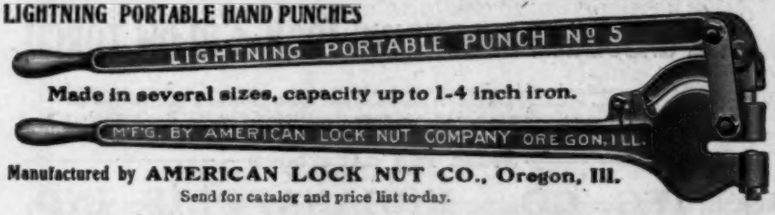
Illustrated Booklets of TILES and VENTILATORS will be mailed free upon application

MERCHANT & EVANS CO.

Philadelphia, Chicago, New York, Brooklyn, Baltimore, Kansas City.

Successors to MERCHANT & CO., Inc., Sole Manufacturers.

LIGHTNING PORTABLE HAND PUNCHES



Made in several sizes, capacity up to 1-4 inch iron.

Manufactured by AMERICAN LOCK NUT CO., Oregon, Ill.

Send for catalog and price list to-day.

GRAY'S

Perfect Elbow Patterns

On Heavy Blue Print Paper

From one inch to 20 inches,

Price $1.00, Prepaid

From 20 inches to 40 inches,

Price $1.00, Prepaid

From one inch to 40 inches. Made in 2-3-4-5-6-7 and 8 pieces. 160 patterns and angle chart showing all angles and degrees of same gotten from 160 patterns. An exhaustive work strongly recommended by eminent critics.

Price $2.00 Prepaid

GRAY'S

Perfect Skylight Patterns

For Single Pitch Skylights
For Gable Skylights
For Hip Skylights

Contains 6 to 8 and 10 inch ventilator patterns and skylight chart, giving the length to cut hip and rafter bars for any size skylight up to 24 feet wide, for one-third pitch skylights. Full set of patterns and charts.

Price $3.50, Prepaid

DANIEL STERN

69 Dearborn Street
CHICAGO

VROOMAN'S PEERLESS

VITREOUS ENAMELED STEEL-PATENT SANITARY

SINK STRAINER

THE FAVORITE ONE.

It is **NOW** in order

FOR DEALERS AND JOBBERS TO BUY

VROOMAN'S

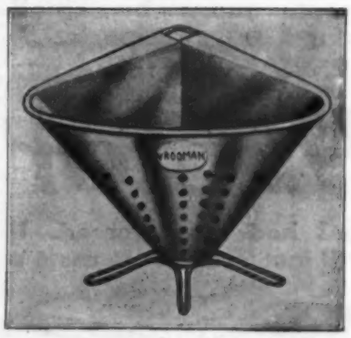
Enameled Steel Sink Strainers

FOR THE

HOLIDAY TRADE.

It is ever appropriate as a present.
It is ever appreciated by the happy recipient.
Its Utility and Superiority are well known.

NOW made in attractive colors



Beautiful TURKoise Exterior, Pure White Lining

ALL PURE WHITE. ALL TURQUOISE.

Exquisite Stone Gray, Mottled White.

ALSO PLAIN ENAMEL.

FIVE COLORS—TWO SIZES—TEN KINDS—ENAMELED

Highest Grade Enamel Known to the Trade To-day, as to Quality and Appearance, whether Domestic or Imported.

CAN BE USED IN ANY SINK WITH STAND.

WILL LAST A LIFE TIME.

Order from Your Jobber NOW or from

F. H. & E. B. Vrooman

325 Dearborn Street, CHICAGO.

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4 Trains a Day

via the

MONON ROUTE

Chicago, Indianapolis & Louisville Railway

and C. H. & D. Ry

Only 8 Hours

from

CHICAGO

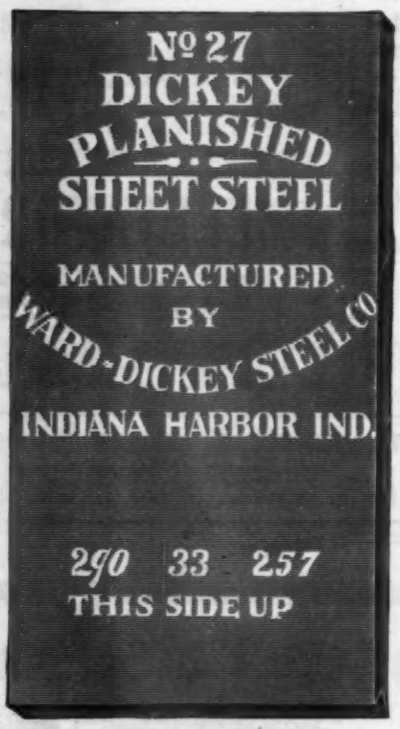
to

CINCINNATI

BY DAY, Parlor and Dining Cars
BY NIGHT, Palace Sleeping and Compartment Cars.

CHAS. H. ROCKWELL, Traffic Manager. FRANK A. REDD, Gen. Pass. Agt.
200 Custom House Place, CHICAGO.

The Dunlap Mfg. Co.,
Dunlap, Iowa, write:
"We find much that is of interest and value to us in THE AMERICAN ARTISAN."



Hammer Planished

In the essential properties that make for looks, work and wear, it has no equal.

Gauges No. 18 to 28 inclusive : : :

Manufactured by

Ward-Dickey Steel Co.

INDIANA HARBOR, IND.

A Business Man's Reputation

will be good or bad just as he is careful about the small rivet in a furnace, the pin hole in a roofing plate or the bottom of a coal hod. People judge by small things.

The bottom of the

Victor

coal hod is reinforced. It will last forever. It costs a

trifle more because of the extra profits allowed the dealer, but this is more than offset by its durability, its attractiveness. Its use will give the retailer a reputation for honor and pride.

Ask about Victor Water Pails and Wash Tubs.

The Victor Stamping Company

Broadway, LOVELAND, OHIO

MAKE MORE MONEY

Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the easiest sold and the best advertised.

SIGNAL MAIL BOX CO.
106 Benton St., Joliet, Illinois

POCKET KNIVES

Non-rusting, unbreakable steel handle.
PATENTED.
Extra good, strong three-inch blade.
Unusually Good Seller.
Send for free sample. $1.36 per doz., net cash, f. o. b.
Large discount to jobbers.

H. O. KEFERSTEIN, BARBERTON, OHIO

$5.85
Per Dozen.
Sample 50c. Cash.

ALUMINUM FINISH

Absolutely Tight. No Rough Edges. Ends double seamed on. The Best Box Made. A Sample will Convince. Immediate Shipments.

ROYAL MAIL BOX CO.
CLEVELAND, O.

ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power

Send for circulars

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 129 Vincent St., CLEVELAND, O.

Blick No. 3 The Best Box

FOR RURAL FREE DELIVERY

$5.88 Per Dozen

BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 6½x8½x19 inches. Made of heavy galvanized steel. Painted green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.

THE IDEAL

$5.50 Per Doz.

$5.50 Per Doz.

No Better Boxes for Rural Free Delivery

All parts stamped and no rough edges. Made of heavy galvanized steel. Lock signal. Each box tested and warranted. What's the use paying more, $5.50 per dozen is enough. Order at once.

Aluminum Finish 25c. Per Dozen Extra

SMITH BROS. MFG. CO.
246-254 E Kinzie Street, CHICAGO

L. W. Richards, Memphis, Tenn., writes: "Inclosed please find check for $2 for which kindly send me the American Artisan for one year and your House Warming Manual as advertised. I consider the American Artisan and Hardware Record one of the most valuable books ever published for my line of business and I wish you success." 11-05

HOMESEEKERS EXCURSIONS Via NORFOLK & WESTERN RAILWAY

On FIRST and THIRD TUESDAYS in each month to **VIRGINIA**

For all information as to Rates and Tickets and for LAND PAMPHLET and descriptive matter, address ALLEN HULL, D. P. Agt., Columbus, Ohio

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Magic Pattern Rule Will Lay Out Patterns

for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

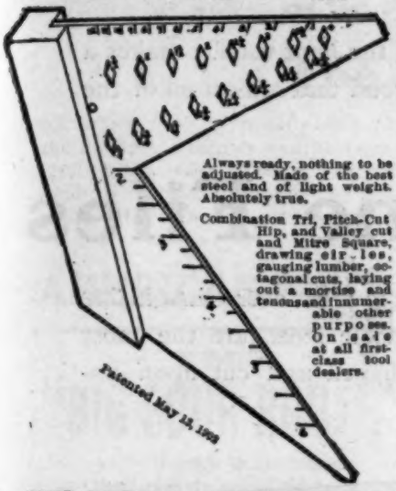
Price, complete in a nice wooden box with Chart, $4.00 net cash.

LUFKIN RULE CO., Saginaw, Mich. (Mention THE AMERICAN ARTISAN.)

New Universal Square

Made in Three Sizes

No. 1	6 inches	-	$0.65
No. 2	10 inches	-	1.00
No. 3	13 inches	-	1.50



THE DUBY & SHINN MFG. CO.
INCORPORATED
Nelson Bldg., 19 Park Place, New York City
(Please mention The American Artisan.)

Steel Hardware Shelf Boxes

Screw Cases, Etc.

Send for Circulars.

HELLER CO., Montclair, N. J.
or GEO. W. HEILAND, 213 Washington St., Chicago, Ill

JULIUS DEERING
of Eau Claire, Wis., writes:

Kindly discontinue my ad in your valuable paper as I have found the party desired. I always receive about fifteen letters when I use your want columns.

12—5

A.B.C.

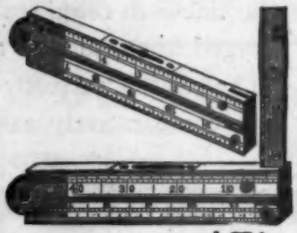
Acme Ball-Bearing Casters

Made for all kinds of furniture. Scientifically constructed. Used in all parts of the *world*. Ask for the A. B. C. Casters. Accept no other. Ask your dealer for them.

Dept. 656

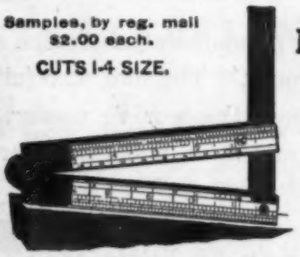
SMITH & HEMENWAY CO.

296 Broadway New York City. Mfrs. Cutlery & Hdwe. Specialties.



Samples, by reg. mail $2.00 each.

CUTS 1-4 SIZE.



COMBINATION

RULE

Spirit Level, Square, Plumb, Bevel, Inclinometer, or Slope Level, Brace Scale, Protractor, Right Angle Triangle, etc.

UNION FACTORY.
Lock Drawer 13.

The **CHAPIN-STEPHENS CO.**
PINE MEADOW, CONN., U. S. A.

TOOLS FOR TOOL USERS

are "OHIO" TOOLS. They are not made for show case purposes only. Skilled artisans know them for tools of excellent quality with perfect tough and lasting cutting edges. It pays the dealer to handle such tools.

Our line is an extensive one, including

CHISELS, DRAWING KNIVES, GOUGES, PLANES, both Iron and Wood, AUGER BITS, BENCH and HAND SCREWS, Etc.

No. 04

OHIO TOOL COMPANY

NOTE: We Do Not Sell Catalogue Houses

Factories: COLUMBUS, OHIO
AUBURN, N. Y.

The Hand Screw with the Saw-Cut Thread

The Best That Money Can Buy.

Our Hand Screws are the result of 15 years' experience in making Cabinet Maker Clamps, Etc. We make a complete line of Cabinet Clamps, Cabinet and Manual Training Benches and Factory Trucks.

Write for Catalog.

GRAND RAPIDS HAND SCREW CO.
160 South Ionia Street, GRAND RAPIDS, MICH.

No. 5, $4.00 Each

We are producing this Level to give users all the advantages of a full brass bound level at a nominal price. The stock is very choice selected cherry, corners are heavy, tips cast, and especially hard, to stand wear.

A beautiful Level, polished and strictly first class. Packed one in a box, and six in a case. Any dealer can handle a case very quickly. Write for discount.

THE BAKER-McMILLEN CO., AKRON, OHIO, U. S. A.

STANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers NEW BRITAIN, CONN.

It Is Pretty Hard

to find a real good thing but the extra exertion necessary in the hunt usually makes a man appreciate the thing when he does find it. We are proud that almost all of the dealers who start in handling

Disston Superfine Files

become permanent customers. Our line is so complete as to meet every imaginable requirement. The files, carefully forged from the best crucible steel, are the most durable on the world's market. The teeth, correctly shaped and cut upon improved machines, make the user's job comparatively easy.

You will only be doing yourself a good turn by writing for our complete catalog, containing our file price lists, and describing lots of other high grade tools.

Quality Tells

Henry Disston & Sons, Inc.,
Keystone Saw, Tool, Steel and File Works,
PHILADELPHIA. :-: PA.

The World's Standard
"Pullman" Coil Door Springs

Malleable Iron Hooks
No. 209 Japanned Screw Eyes
We are booking orders now for Spring Delivery
Price guaranteed to date of shipment
PULLMAN MFG. CO., Rochester, N. Y.

Don't let your Town Folks Break their Necks

Sell them our **"ALASKA"** steel Snow Shovels and **"KLONDYKE"** Sidewalk Cleaners. They make paths clear and safe as a kitchen floor.

We will give you lists and discounts if your jobber does not. Let us hear from you.

We make a full line of Shovels, Spades and Scoops, also the famous "NEVER-BREAK" Cooking Utensils of Seamless Sheet Steel.

THE AVERY STAMPING CO., CLEVELAND, OHIO
Sole Manufacturers "NEVER-BREAK" GOODS.

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc., Trades.

This Agency issues as complete and reliable book of credit ratings fo this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. The *paying record* is based upon *ledger experience* of credit men everywhere.

You buy credit information. Isn't it the part of a good buyer to post himself thoroughly on the merits of a book of ratings, gotten up especially for his trade by men with ample capital and who are thoroughly trained in this class of work and who make a *specialty* of it?

Terms of subscription can be had by addressing Executive Office

Iron and Hardware Mercantile Agency.

157 Federal Street. BOSTON, MASS.

TO JOBBERS AND DEALERS IN

Hand Farming and Garden Tools

we wish to say that we offer you unequalled advantages. Our goods have been the best of their kind and will remain

The Standard of Excellence

for which they are noted. No progressive horticulturist or agriculturist can get along without them, and the backward farmer will become your most zealous patron when once you sell him our implements. Our facilities are unequalled. We have factories located in different sections of America, equipped with most modern machinery under the management of experts in this branch of industry. First-class goods and prompt delivery assured when you handle the products

MANUFACTURED BY THE

AMERICAN FORK & HOE COMPANY, CLEVELAND, OHIO

THE

"BIG FOUR ROUTE"

passes through an interesting Country every mile of the way

CHICAGO TO

INDIANAPOLIS
CINCINNATI
LOUISVILLE

and all points

SOUTH

AND

SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. Rys. For reservations, etc., call on or address

I. P. SPINING, G. N. A.
238 Clark Street - - - CHICAGO

You'll Be Surprised

at the demand there is for a really GOOD Post-Hole Auger if you take up the sale of the

Iwan Post-Hole AND Well Auger,

the most largely sold and the most prominently advertised earth auger on the market, our advertising reaching all classes of consumers who have use for a post-hole auger.

It takes a ***Large Variety of Sizes*** to satisfy so many consumers, We make the augers in 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14-inch sizes. 16-inch size in preparation.

ORDER YOUR SPRING SUPPLY

from your Jobber NOW, and include ***Iwan Drain Cleaners, Ditching Spades*** and ***Post-Hole Diggers.*** Send for list of complete line.

IWAN BROTHERS, Manufacturers of Hardware Specialties, ***Streator, Ill.***

GARLAND NUT & RIVET Co. PITTSBURGH

SMALL RIVETS

FOR ALL PURPOSES

SELECTED MATERIAL
UNIFORMITY
GOOD APPEARANCE
SQUARE CUT-OFF
QUICK SHIPMENTS

SMALL BOLTS
AND
PUMP CHAIN

GARLAND NUT & RIVET CO.
PITTSBURGH, PA.

Gillette Safety Razor

NO STROPPING. NO HONING.

Perfection at Last.

ALWAYS READY, ALWAYS KEEN.

Simply Lather and Shave.

THERE IS NOTHING TO ADJUST, NOTHING TO LEARN.

This cut is full size

BUILT LIKE A WATCH, TO LAST FOR YEARS.

The wonderful feature of this razor is the blade. Twelve blades (twenty-four sharp edges) as THIN as paper, as HARD as flint, as TOUGH and FLEXIBLE as whalebone, go with each set. EACH BLADE is good for from TWENTY TO FORTY SHAVES.

Triple silver-plated set with 12 blades, $5.00

Ten extra blades 50 cents.

Awarded a Gold Medal at St. Louis in 1904.

A TRADE LEADER

All Leading Cutlery and Hardware Dealers carry "The Gillette."

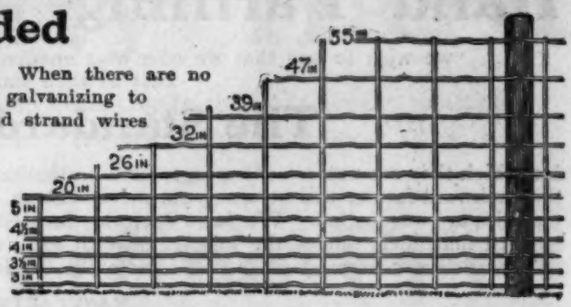
Write us for descriptive booklet.

GILLETTE SALES COMPANY, TIMES BLDG., NEW YORK CITY.

"Pittsburgh Perfect" Fences

Electrically Welded

When the joints are electrically welded there are no wraps. When there are no wraps there is no chance for moisture to accumulate, for the galvanizing to crack, for the wire to be rusted. Stays cannot slip; stay and strand wires become one piece when the union is made. These fences



WILL LAST LONGER THAN ANY ON THE MARKET

WRITE FOR CATALOG

Pittsburgh Steel Co., Pittsburgh, Pa.

THE ONLY FREEZERS MADE HAVING

Cedar Pails with Electric Welded Wire Hoops, Cans of Heavy Tin with Drawn Steel Bottoms, AUTOMATIC Tin Scrapers.

"Lightning"

"Blizzard"

AMERICAN TWIN FREEZER

Freezes Two Flavors at One Time.

Your Trade Wants It.

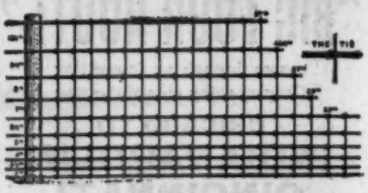
"American Twin"

THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

SOLD BY LEADING JOBBERS. CATALOG SENT FREE.

North Bros. Mfg. Co., Philadelphia.

The Fence That Suits



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Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything. Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

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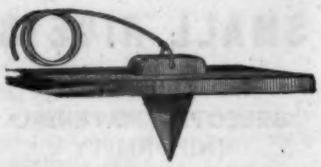
Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.



The only Anchor made for between the posts and for corner posts.

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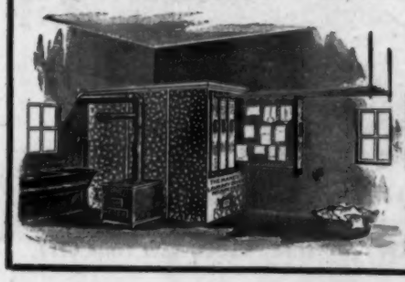

Another Pleased Customer Says:

Nov. 14, 1905.

Gentlemen:—Herewith find check for balance of your bill of Sept. 23rd. So far the **Dryers** and **Gas Furnaces** give entire satisfaction, in fact, are a great comfort and convenience. Should they get out of order I will call on you for assistance as may prove necessary. Yours truly,

A. ST. J. NEWBERRY.

THE MANNEN & ESTERLY COMPANY

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Corrects to any Faucet. Attached or Detached in Ten Seconds. The Handiest Household Tool Ever Produced

GRINDS, POLISHES, BUFFS ANYTHING

Furnishes Power for Sewing Machines, Small Lathes, Scroll Saws, Dental Lathes and other small machines

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Full Line of Supplies Furnished for Any Kind of Work

Price Complete. — Including emery, buffing, pulley wheels, lathe corrector and polishing composition, **$4.00**

This ad and $3.50 will get the motor. Liberal discounts to the trade.

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This Label on all Taplin's Pat. Improved **Dover Egg Beaters** stands for **Quality and Durability.**
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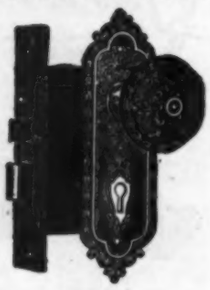
MANUFACTURERS OF **LIGHT GRAY IRON CASTINGS**

Builders' Hardware, Dampers and Damper Clips, Oil and Gas Stoves, Furnace Lamps, Molasses Gates, Letter Boxes, Hardware Specialties.



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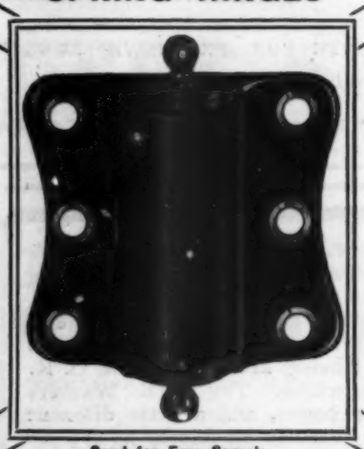
SCREEN DOOR

SPRING HINGES

ALL STEEL HOLDBACK

A wrought steel spring hinge having a powerful triple coiled, smooth-acting spring which swings the door quickly and evenly from any angle. **Shuts the door** and **keeps** it **shut.**

Broad bearing surfaces increase the efficiency of the hinge and prevent sagging of door. The "Columbian" is simple, rigid, compact and practically unbreakable.



Note the clean cut symmetrical appearance of the hinge. The edges of flanges are bent down at right angles to form a bead, all around, thus giving a neat, beveled effect, strengthening the flanges and leaving no raw edges to be torn or bent. A good looker and a fine wearer at a popular price.

Send for Free Sample and Our Catalog No. 14 of

"SCREEN DOOR FIXINS"

describing our complete line of screen door hinges, screen door sets, door springs, door pulls, etc.

The COLUMBIAN HARDWARE CO.

Manufacturers High Grade Hardware. **CLEVELAND, OHIO**

WAVERLY WASHER

NO COGS ON OURS

Easiest Operated Easiest SOLD

Does
Gets
Holds
Increases
THE BUSINESS
Easily
Quickly
Continuously
Satisfactorily

That's WHY WISE Dealers
"Push the Green Machine"

EXCLUSIVE AGENCIES

WAVERLY WOODENWARE WORKS, St. Joseph, Mo., U. S. A.

A Mere Glance

at this illustration does not suffice.
The true merit of the

"BB" Roller Gearing Rotary Washer

is understood and appreciated upon examination and trial.

It pays to investigate.

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THAT WONT COME OFF
Is always worn by the THRIFTY HOUSEWIFE who uses a

WHITE LILY WASHING MACHINE

WRITE FOR EXCLUSIVE AGENCY
WHITE LILY WASHER CO.
TOLEDO, OHIO. DAVENPORT, IOWA

Don't wait until some other Hardware Merchant is selling all the O. K. Washing Machines in your vicinity.

Take up their sale now—before some of your competitors—and you'll have the prestige of being first to sell the O. K. Washing Machine. The O. K. Washers are a little better, and a little different from other Washing Machines.

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But Advertisements *always* pay:
They're somehow *always* in the way.

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Standard Quality and Workmanship Guaranteed.
Prompt Shipment.
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Simple in Design.
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Send for Descriptive Catalogue and Prices.

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With Covered Gear

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Best In the Market—Made With Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

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Is your store well lighted? How about your neighbors? Can't you sell them an outfit? No part of your business more profitable. Write us at once for full particulars and we will show you why our System is better, cheaper and in every way superior to any now in use.

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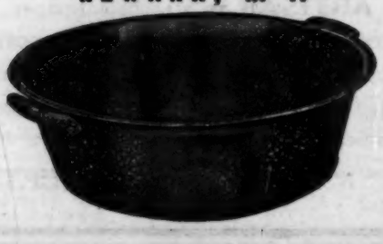

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Square Dealers

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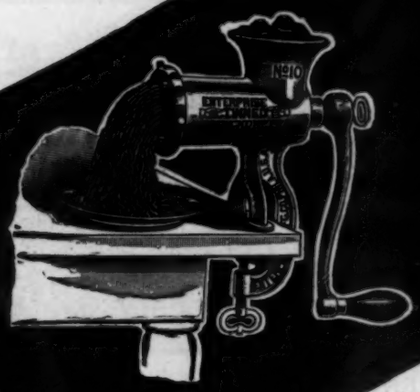

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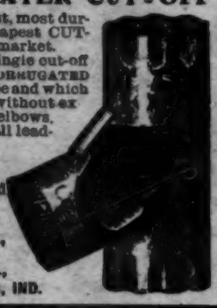

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